Practice Guide for Nature Positive Activities

Landscape Approach–Driven Nature Restoration and Regional Value Creation

Ver. 1.0

Tohoku University Nature Positive Sustainable Development Hub

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Message from the Tohoku University Nature Positive Sustainable Development Hub

Sincere conservation efforts accumulated over time have yielded substantial benefits for local communities and society. In recent years, there has been a growing need to expand these achievements into solving problems that transcend river basins, administrative boundaries, and national borders, connecting them to a more comprehensive perspective that strengthens the foundations of regional economies and livelihoods.

The Nature Positive Initiative is an extremely ambitious international goal, agreed upon by global partners in 2022, to further advance this movement by committing to “conserving and restoring nature” on a planetary scale.

The key concept involves three stages: **Stop → Reverse → Improve**. It represents a complete shift in thinking, moving from merely protecting nature to **actively achieving its conservation and restoration**.

To use a financial analogy, while traditional conservation is about saving to avoid deficits, the Nature Positive Initiative is about actively investing for the future to build assets.

This isn’t about distant wilderness. Our daily lives and economic activities are not separate from nature. **We are mutually dependent and influence each other**. For example, industry and agriculture cannot function without clean water. The water we use is returned to rivers. We depend on nature while simultaneously impacting it.

Conserving and restoring nature requires a perspective that integrates local economies, industries, and livelihoods to find solutions—the landscape approach.

So, how should we actually approach this initiative? First, we prioritize **avoiding** negative impacts altogether. When avoidance is difficult, we **minimize** the impact as much as possible. For those impacts that remain, we actively pursue **conservation and restoration**. Ultimately, we challenge ourselves to **rethink the very societal systems** at the root of the problem.

This is **the principle of priority ranking (mitigation hierarchy) crucial for advancing the Nature Positive Initiative**. Nature-positive activities are not a one-time event but rather follow a cycle: **[Evaluation] → [Planning] → [Implementation] → [Monitoring] → [Improvement] → [Growing the Community]**

By the repetition of this cycle, activities gain momentum like a flywheel, eventually growing into initiatives that engage the entire community. As a result, **nature-positive principles become embedded in municipal policies and corporate management strategies**. Mechanisms for coexisting with nature take root throughout the community, building a sustainable economy and way of life.

Our key message is that “**Nature Positive is not a cost, but an investment in the future**.”

A healthy natural environment revitalizes the local economy through agriculture, tourism, and more, enriching and stabilizing livelihoods. This creates a virtuous cycle that strives to enrich nature, the economy, and daily life alike.

In our regions, **nature awaits our helping hand to be restored**. Through the Nature Positive Initiative, let us restore nature, uncover the dormant value of our regions, and connect to a future our children can be proud of.

Table of Contents

Introduction

Today, efforts toward achieving the **Nature Positive** Initiative—aiming to **halt nature loss and reverse it toward recovery**—are urgently needed. While businesses, local governments, and communities are recognizing the importance of these goals and beginning to plan and implement actions, fundamental understanding and interest remain insufficient. Questions like “What does restoring nature mean?”, “Why is local action necessary?”, and “How does nature restoration relate to the local economy?” often go unanswered. Activities lacking scientific basis or economic perspective are also observed.

What is needed are initiatives that go beyond traditional environmental impact reduction and nature conservation activities, incorporating **an economic perspective that simultaneously aims for nature-positive outcomes and value creation**. Regions are home to diverse communities and organizations involved in industries such as agriculture, forestry, fisheries, manufacturing, distribution, and tourism, as well as in daily life through households, schools, and recreation. By linking the **restoration of natural environments** with the **resolution of challenges faced by each stakeholder** through a **landscape approach (an integrated perspective and initiative at the watershed or landscape level that integrates ecosystems with society and industry)**, we can expect to **revitalize regions and enhance their resilience** (the ability to withstand, adapt to, and recover from change).

Against this backdrop, this document was developed with the following objectives:

- to encourage stakeholders to take the first step, even if there is insufficient understanding of the differences from conventional environmental load reduction
- to provide guidance for advancing step by step, gradually building a community around the landscape approach
- to chart a path from nature conservation activities to initiatives that **put nature restoration on track**
- to organize methods for advancing activities comprehensively, from preparation to execution, while gaining community understanding
- to provide insights for transitioning toward a society that creates a virtuous cycle of nature positivity and regional revitalization.

By using this book as a reference, we hope that local stakeholders will collaborate to advance nature-positive activities. By protecting nature, you can enhance the value of your local community and **spiral upward through cyclical development toward a sustainable and proud future.**

Nature Positive

(2022) (https://www.env.go.jp/nature/biodiversity/kmgbf.html)

> “To take urgent action to halt and reverse biodiversity loss to put nature on a path to recovery by 2030, and to live in harmony with nature by 2050.”

Landscape Approach

UNU-IAS: Guide for Incorporating the Landscape Approach into National Biodiversity Strategies and Action Plans (https://satoyamainitiative.org/wp-content/uploads/2019/06/Using_Landscape_Approaches_in_NBSAPs.pdf)

> “Landscape approaches aim to reconcile biodiversity conservation with human well-being by integrating ecological, social, and economic dimensions across spatial scales and governance levels.”
>
> Landscape approaches refer to strategies that aim to harmonize human livelihoods with biodiversity, taking into account the ecological and socioeconomic context of a region.

Resilience

Task Force on Climate-Related Financial Disclosures (TCFD, 2017) (https://www.fsb-tcfd.org/publications/)

> Resilience refers to an organization’s ability to adapt to climate-related risks and opportunities and continue operating effectively.

Achieving Nature Positive and Value Creation Simultaneously

Ministry of the Environment: Roadmap for Transition to a Nature-Positive Economy (2025) (https://www.env.go.jp/press/press_00333.html)

> Understanding of the concept and significance of the Nature Positive Initiative has not sufficiently permeated society, and initiatives by companies, local governments, and regional communities remain limited.

Target Users of This Document

All individuals and organizations working to address nature conservation and restoration (nature-positive activities) through an integrated approach that considers regional economies, industries, and livelihoods (the landscape approach)

How to Use This Document

■ **Take the First Step**
You don't need to implement everything perfectly from the start. Begin with what you can do—whether it's activities that reduce negative impacts on nature or small-scale, simple initiatives. This book is structured for those starting from scratch, and it is recommended that you find activities and locations that suit your capabilities and take action within manageable limits.

■ **Work Together with a Shared Vision by Using the Landscape Approach**
Adopt the perspective of the landscape approach, which views nature and human activities as an integrated whole. Collaborate and coordinate with diverse stakeholders—local residents, businesses, government, researchers—to advance initiatives. Beyond nature conservation, prioritize sharing insights on local industry and community challenges, aligning values among stakeholders, and deepening mutual understanding. This fosters a shared vision and leads to compelling, impactful activities.

■ **Establish Clear Procedures for Appropriate Implementation, Including Safety and Environmental Considerations**
Begin initiatives within the scope of existing resources and capabilities. Proceed through trial and error, flexibly adjusting activity content and direction as needed. It is possible to restart midway or add to existing activities. However, for field activities (on-site activities), clearly define implementation procedures beforehand, including on-site safety and environmental considerations, and proceed with appropriate systems in place.

■ **Spiral Upward Toward Nature-Positive Activities Through Integrated Efforts**
Natural capital challenges are closely intertwined with other environmental issues such as climate change and circular economies, as well as with regional history, culture, and economics. By understanding the side effects (i.e., negative impacts on other issues) of these complex challenges and addressing them holistically, we can gradually progress toward regeneration and recovery. Through continuous improvement and collaboration, let's enhance the value of local nature and livelihoods, spiraling upward toward nature-positive activities.

Nature Positive and Society/Economy

G7 2030 "Nature Pact" (2021) (https://www.mofa.go.jp/mofaj/files/100200012.pdf)
"Nature, and the biodiversity that underpins it, ultimately sustains our economies, livelihoods, and the well-being of people – our decisions must take into account the true value of the goods and services we derive from it."

Kunming-Montreal Global Biodiversity Framework (2022)
(https://www.env.go.jp/nature/biodiversity/kmgbf.html)
"By 2030, halt and reverse biodiversity loss to put nature on a path to recovery for the benefit of people and planet."
"Parties are encouraged to adopt integrated landscape approaches to ensure the conservation and sustainable use of biodiversity across sectors and scales."

World Economic Forum (WEF) report Nature Risk Rising (2020)
(https://www.weforum.org/publications/nature-risk-rising-why-the-crisis-engulfing-nature-matters-for-business-and-the-economy/)
"USD 44 trillion of economic value generation – over half of the world's total GDP – is moderately or highly dependent on nature and its services."

Structure of This Document

This book is structured into four parts: A, B, C, and D. If sufficient information is not readily available or if certain activities are already underway, it is possible to start with any of Parts A, B, C, or D and proceed by skipping some sections. It is recommended that activities be gradually built through iterative steps, involving more partners, and that these items be repeatedly addressed over the long term to incrementally enhance the quality and scope of activities.

Note that achieving a scientifically nature-positive state for a region requires the participation of experts with scientific knowledge. While this book is designed so that volunteers without deep expertise can tackle sections up to 1.3 Understanding the Natural State and Sharing Challenges, the sections from 1.4 Setting Goals onward are intended to be advanced with the support of experts possessing scientific knowledge.

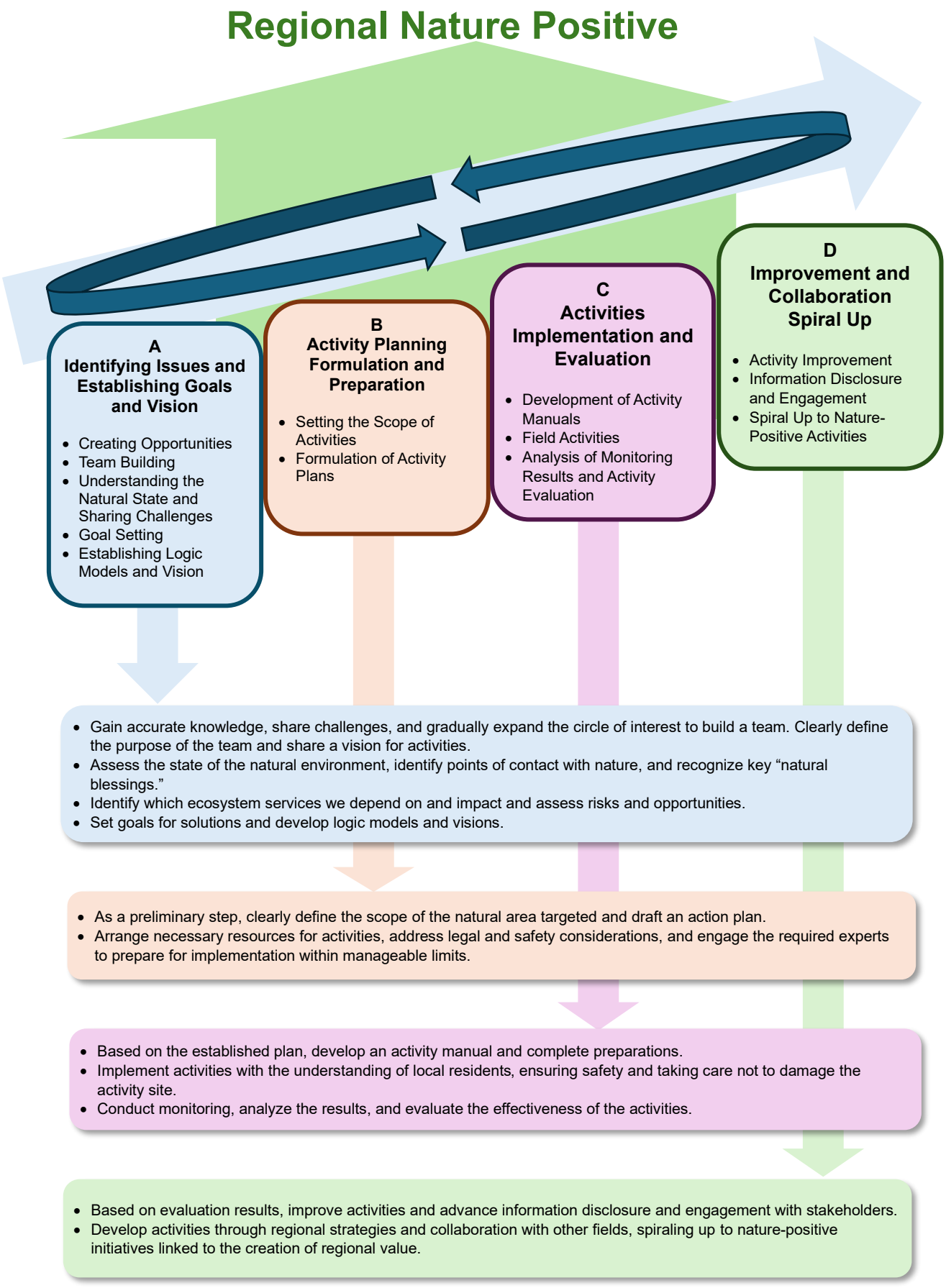


Figure 1: Concept of activity step-up

The primary drivers that depend on, and impact, local nature are industry and daily life. This document views their relationship as follows, aiming for nature positivity while identifying risks and opportunities.

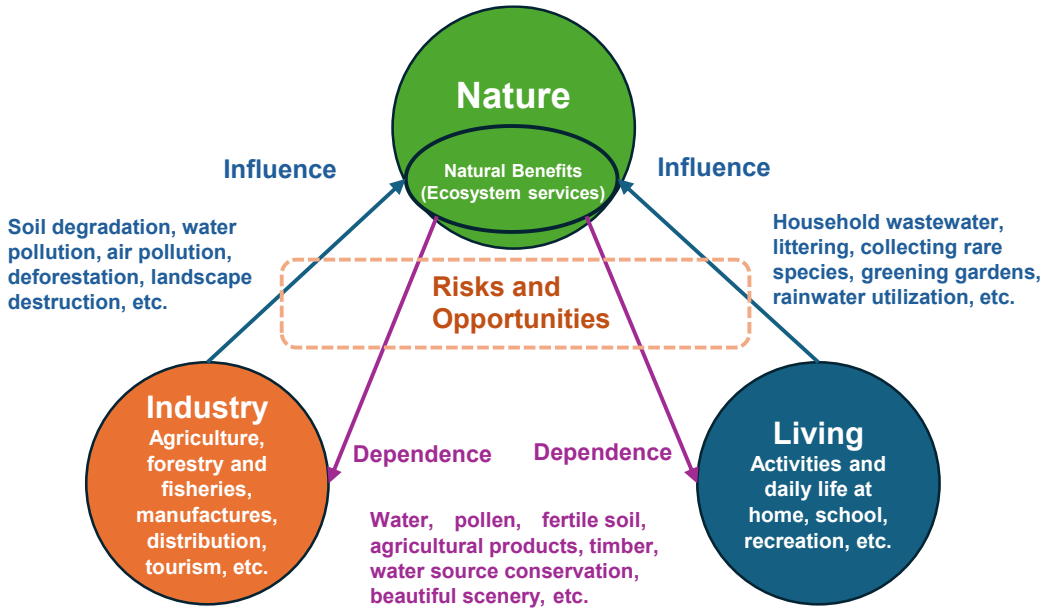
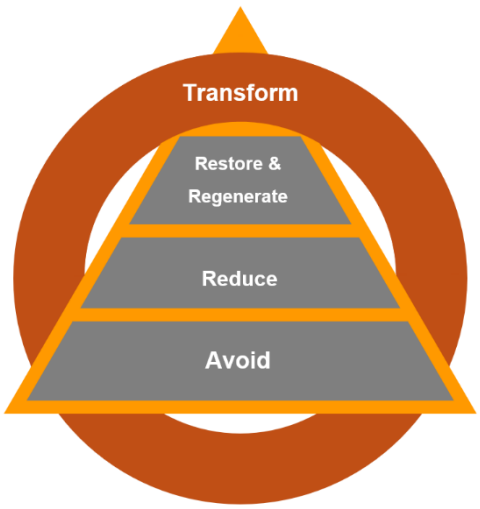


Figure 2: Relationship between dependence on, and impact of, nature and risks and opportunities in the region

As a framework for contributing to “Nature Positive” through responsible action, the Science-Based Targets Network (SBTN), which develops natural capital target guidance, proposes the AR3T action framework.

AR3T outlines four steps: avoid, reduce, restore/regenerate, and transform. It is an approach that first considers whether activities having negative impacts on nature can be avoided altogether, then systematically explores initiatives in ascending order. This framework is becoming established as a standard approach, not only for businesses but also for government and civic activities.

This framework is also incorporated into the approach presented in this book.



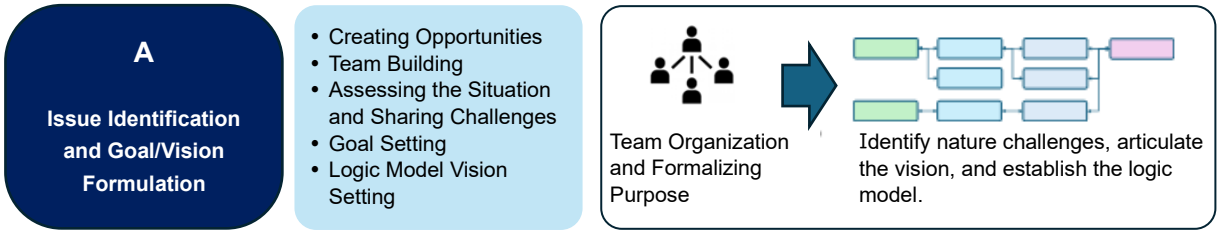
Transform	Transform the social and economic systems that are the root causes of nature loss. e.g. Redesigning supply chains and reviewing consumer behavior.
Restore / Regenerate	Restoring lost natural environments and promoting the regenerative capacity of nature. e.g. Afforestation activities to support the restoration of biodiversity.
Reduce	Minimize negative impacts that cannot be fully eliminated. e.g. Reducing water usage and land use.
Avoid	Prevent negative impacts from happening in the first place. eliminate negative impacts entirely. e.g. Avoiding deforestation and destruction of wetlands.

Figure 3: AR3T Framework

Science-based targets for nature AR3T Action Framework and Overview (quoted from SBTs for Nature, Initial Guidance for Business)

1. Issue Identification and Goal/Vision Setting [A]

After the team has been established, the next step is to analyze the current state of the region and nature from an “industry and living” perspective to identify challenges. On the basis of this, nature-positive goals are then set for the region and a logic model and vision are developed.



Initiatives that can be described as “regionally nature positive” are being developed in various forms, as shown in the following examples:

- Cases where an individual recognizes an issue and begins activities alone (or with a very small group), and then a person capable of engaging many stakeholders emerges, leading to the development of activities for the entire region (e.g., regenerating seaweed beds to address coastal erosion)
- Cases where local governments integrate the solving of regional environmental challenges with community development, with various individuals and organizations taking on the responsibility (e.g., Toyooka City’s creation of an environmental culture nurturing storks, Iida City’s community development fostering nature coexistence)
- Cases where initiatives started by companies to solve their own problems attract local interest and eventually expand into community-wide activities (e.g., watershed conservation, winter flooded paddies)
- Cases where individuals with a strong desire to make a place nature positive gather stakeholders, and the specific focus of the effort is agreed upon and initiated once the team is formed (e.g., Shiretoko’s registration as a World Natural Heritage site)
- Cases where societal demands or national policies trigger new challenges, sparking resonance and evolving into large-scale activities involving both local and external stakeholders (e.g., expansion of regenerative agriculture, certification for sustainable agriculture/forestry)

The paths leading to concrete activities vary widely. The guidelines below are intended to be used at appropriate times within each activity; there is no fixed sequence.

First, clarify the purpose (“Why do it?”), then form a team. Proceed by assessing the current situation, identifying and sharing challenges, envisioning the desired future state (“the vision”), and setting goals to achieve the purpose.

1.1 Creating the Initial Momentum (First Step)

Begin by broadening understanding of nature-positive activities within the community and lay the groundwork for team formation.

Nature-positive activities differ from traditional nature conservation activities focused solely on “protecting nature” or “limiting efforts to protecting specific species of interest.” They encompass activities that contribute to the internationally agreed goal of “halting biodiversity loss and putting it on a

path to recovery by 2030.”

1.1.1 Acquiring Knowledge

It is vital to understand global environmental challenges, the concepts underlying the Nature Positive Initiative, and domestic and international policies.

Nature-positive activities were defined in the G7 2030 Nature Pact adopted at the 2021 G7 Summit as those aimed at “halting and reversing biodiversity loss by 2030.” Subsequently, an international goal with the same intent was adopted at the 2022 CBD COP15 (i.e., within the Kunming–Montreal Global Biodiversity Framework). In Japan, this led to the formulation of the “Nature Positive Economic Transition Strategy.” In 2021, the Taskforce on Nature-Related Financial Disclosures (TNFD) was established as a framework for companies and financial institutions to assess their impacts and dependence on natural capital and biodiversity and to disclose related risks and opportunities as financial information.

○ Key National Strategies and Frameworks

- The Kunming–Montreal Global Biodiversity Framework (GBF), agreed upon at the United Nations in December 2022
  ⇒ This international agreement, adopted under the UN Convention on Biological Diversity, aims to “reverse biodiversity loss by 2030” and serves as the foundation for national and regional action plans.
- The “Nature Positive Economic Transition Strategy” formulated by the Japanese Ministry of the Environment and other relevant ministries and agencies
  ⇒ A strategy enabling diverse stakeholders, including regions, businesses, and citizens, to progressively transition toward reconciling biodiversity restoration with economic activities. Its integration into regional strategies and municipal plans is recommended.
- International frameworks concerning natural capital, such as guidance from the Task Force on Nature-Related Financial Disclosures (TNFD) and the LEAP approach (Locate, Evaluate, Assess, Prepare).
  ⇒ A practical framework for companies and local governments to assess nature-related risks and opportunities and integrate them into their strategies.

To deepen understanding of the Nature Positive Initiative, related international frameworks, and Japan's strategy, participating in external seminars or hosting study sessions/roundtables with experts is an effective approach. The following materials are available online:

○ Reference Materials

○ Kunming–Montreal Global Biodiversity Framework (GBF) Related

- Ministry of the Environment: Kunming–Montreal Global Biodiversity Framework Pamphlet (Japanese PDF)
  https://www.biodic.go.jp/biodiversity/about/treaty/files/kmgbf_pamph_jp.pdf
- Ministry of the Environment: Global and National Initiatives Toward Achieving Nature Positive and Required Corporate Actions
  https://ondankataisaku.env.go.jp/carbon_neutral/topics/feature-03.html
- Ministry of Land, Infrastructure, Transport and Tourism: Proposal Materials for "River Restoration to Achieve Nature Positive"
  https://www.mlit.go.jp/report/press/content/001744088.pdf

○ TNFD Guidance and the LEAP Approach

- Ministry of the Environment: Overview of TNFD v1.0 (Japanese PDF)
  https://www.env.go.jp/content/000174924.pdf
- Ministry of the Environment: Explanation of LEAP/TNFD (Japanese PDF)
  https://www.env.go.jp/content/000178847.pdf
- TNFD: Global Site
  https://tnfd.global/

○ Nature-Positive Economic Strategy

- Ministry of the Environment, Ministry of Agriculture, Forestry and Fisheries; Ministry of Economy, Trade and Industry; Ministry of Land, Infrastructure, Transport and Tourism: Nature-Positive Economic Transition Strategy
  https://www.env.go.jp/content/000213092.pdf
- Ministry of the Environment: Roadmap for the Nature-Positive Economic Transition Strategy (2025-2030)
  https://www.env.go.jp/content/000333089.pdf

1.1.2 Sharing Challenges

To better understand the events occurring in our communities and share both the risks of inaction and the benefits achievable through response, gather with interested parties to confirm and discuss points such as the following:

- Recognize global environmental challenges and assess whether they impact the target region (e.g., loss of nature and its associated effects on local communities).
- Assess whether these challenges are reflected in the environmental policies of local governments.
- Consider whether they are reflected in the management strategies and activities of companies with local operations.
- Discuss what effects the initiatives of local governments and companies are having.
- Consider what impacts might have occurred in the region if no initiatives existed.

Creating a space for such discussions and sharing is the first stage* in building a team to advance concrete activities.

> At this stage*, it may be difficult to grasp the concepts underlying the Nature Positive Initiative and to share challenges. In such cases, begin by sharing case studies of already implemented nature-positive activities that have generated concrete improvements in regional branding and economic benefits, as shown in Chapter 4, sections 4.3.1 Initiatives Referencing Regional Examples, 4.3.2 Initiatives Inspired by Corporate Examples, and 4.3.3 Initiatives in Nature-Based Solutions.

1.1.3 Expanding Interest

Gradually reach out to local stakeholders to broaden the circle of interest. Diverse individuals and organizations within the region may show interest, including those engaged in regional revitalization; educators; researchers; agriculture, forestry, and fisheries practitioners; tourism industry stakeholders; local media NGOs; and government officials. Some of these stakeholders may already possess a deep understanding of the challenges and may have begun taking action.

Through small workshops, outdoor activities, and similar events, engage interested individuals and build momentum toward the next steps.

Table 1.1 Creating the Initial Momentum

	What to Do	What to Avoid
1.1.1 Acquiring Knowledge	• Attend relevant seminars. • Share acquired knowledge with relevant parties. • Organize voluntary study sessions with interested parties.	• Attending seminars lacking scientific evidence • Attending seminars focused primarily on academic interests without considering real-world applications
1.1.2 Sharing Challenges	• Confirm how global environmental issues connect to local government environmental policies. • Actively reach out to interested individuals to create opportunities for discussion.	• Having discussions that are overly idealistic • Conducting discussions focused solely on biased interests • Sharing information that lacks scientific basis and excessively stirs fear
1.1.3 Expanding Interest	• Establish loose connections with participants who attend study sessions. • Identify individuals within government, businesses, local communities, academic organizations, and schools who are interested in local environmental issues.	• Holding individuals and organizations accountable for current environmental damage • Promoting grandiose dreams that are unlikely to be implemented at this stage

1.2 Team Building

Prepare for an “Analysis of the Relationship Between the Community and Nature (Points of Contact with Nature, Dependencies and Impacts, Risks and Opportunities)” to be conducted in the next section by establishing the foundational team.

As mentioned earlier, nature-positive initiatives in a community can take various forms. Especially in the initial stages of creating opportunities and team building, the approach will evolve through trial and error. Therefore, please interpret the following content flexibly, including the order of implementation based on the situation, and utilize it as appropriate.

This book assumes cases where individuals or organizations conscious of nature-positive challenges start small and progress by gradually expanding their groups. Therefore, the structure is designed for a small team to tackle steps up to section 1.3 Understanding the Natural State and Sharing Challenges. At the next stage, 1.4 Setting Goals, broader stakeholder participation is sought to reorganize roles and authority, establishing a hierarchical decision-making structure (see Figure 4).

Alternatively, one could first gather a broad range of stakeholders, establish an organization with clear roles and authority, and then proceed with analysis, evaluation, and issue identification. In this case, after section 1.2 Team Building, it is acceptable to proceed to 1.3 Understanding the Natural State and Sharing Challenges and beyond, after establishing the organizational structure as outlined in the next section, 1.4.1 Establishing the Framework for Goal Setting.

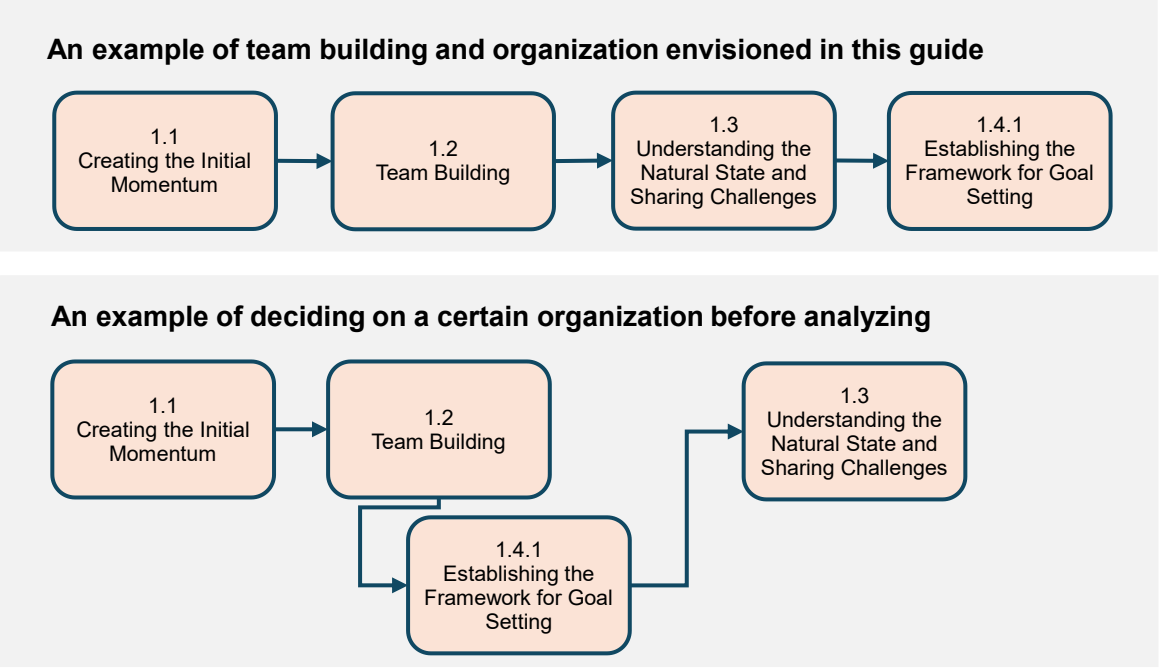


Figure 4: Example of team building and organization

1.2.1 Launch

Use the following steps as a reference to build your team.

○ Team Building Procedure

- Gather individuals who are enthusiastic about the project and begin team formation.
- Understand each member's perspective on the region and its natural environment.
- Through ongoing communication, increase the "common language" within the team.
- Actively participate in, or organize, study sessions and seminars to foster this common language.
- Share each member's resources, skills, information, and connections, and assign roles accordingly.

It is also effective to approach the following types of individuals early on. Even if they don't join the team from the start, building a relationship where they can be consulted expands the scope of activities.

○ Target Groups to Approach

- Future stakeholders (e.g., government agencies, businesses, residents, students, experts)
- Bridge personnel (individuals who coordinate/facilitate mutual understanding between different entities and support collaboration)
- Individuals responsible for connecting government and citizens in the community (e.g., curators at local museums, staff at prefectural environmental science centers)
- Experts capable of providing guidance or consultation (e.g., individuals or groups engaged in civic activities related to the natural environment or community development; those with experience in the local area or elsewhere)
- Academic personnel knowledgeable about natural capital (e.g., researchers at universities within the prefecture, researchers studying local nature)

1.2.2 Clarifying the Purpose

First, clearly define the purpose to establish why the team has come together. The purpose serves as a compass guiding the direction of activities and forms the foundation for unifying members' awareness. Articulation and sharing of the team's raison d'être and its envisioned future means that the core focus of activities becomes clear.

Avoid stiff language or bureaucratic expressions. Instead, create catchphrases and slogans that excite members, boosting their interest in the activities and willingness to participate.

○ Examples of Catchphrases

- Our Vision for the Future of the " XYZ " Bay
- From Forest to Sea: Connecting Life Project
- The 100-Year Team Connecting Our Region's Nature to the Future
- Building Rivers Where We Can Savor Local Cuisine for Years to Come

Starting activities with an ambiguous purpose risks the team losing direction, disintegrating, or fizzling out. Sharing a clear purpose builds trust and motivation among members, leading to enjoyable, meaningful, and sustainable activities that contribute to nature positivity.

1.2.3 Establishing the Team Structure

Once members are assembled, establish the team structure. Consider lowering the initial participation barriers slightly to make involvement manageable. Always keep records, such as meeting minutes, to clearly document who decided what and when.

○ Elements to Establish

- Set objectives and policies (as mentioned above, these can be provisional at this stage).
- Establish operational meetings and information-sharing forums, with appropriate rules for reporting, sharing, and recording.
- Assign roles.

1.2.4 Estimate the Broad Scope of Activities

Before moving into specific activities and determining the direction and means of analysis, it is important to understand the scale of the activities in advance. By sharing the scale, difficulty level, and priority of activities among members, the team gains an understanding of the range and scale of activities that are feasible. This prevents misalignment in member perceptions and the formulation of overly ambitious plans, thus helping to encourage steady progress in activities.

○ Confirmation Items

- Scope, size, and number of target locations
- Available resources (people, organization, funding)
- Duration of activities

Table 1.2 Team Building

	What to Do	What to Avoid
1.2.1 Launch	• Start with a loose ideas and gradually define team roles and responsibilities. • From the outset, grasp the broad scope of resources needed for activities and begin identifying potential experts.	• Forcing the organization to expand by gathering many participants before the direction of activities and participant roles are clear • Undervaluing specialized expertise
1.2.2 Clarifying the Purpose	• Clearly define the “purpose” and establish “Why did this team come together?”	• Commencing activities with an ambiguous purpose • Unilaterally deciding on a catchphrase
1.2.3 Establishing the Team Structure	• Document the purpose and policies. • Document minimum organizational management policies. • Define roles and responsibilities in writing.	• Setting goals too high from the outset • Developing overly detailed regulations • Misaligning the burden of assigned roles with the current situation
1.2.4 Estimate the Broad Scope of Activities	• Clarify for members which locations will be targeted. • Share with members an image of the scale at which to implement the activities.	• Envisioning a grand plan without considering available resources (people, organization, funds) • Failing to achieve alignment among members regarding their individual ideas about the target areas and scale

1.3 Understanding the Natural State and Sharing Challenges

When determining regional nature-positive targets and initiatives, you must first analyze and understand how the region and its natural environment are connected, before proceeding to section 1.4 Setting Goals.

Protecting and restoring nature is essential, because our work and daily lives are dependent on nature's blessings—water, forests, farmland, and more. However, industrial activities and our lifestyles simultaneously impact the natural environment, both positively and negatively. For example, excessive exploitation damages nature, but properly utilizing and protecting *satoyama* landscapes can positively influence natural resources.

The primary forces that depend on a region's natural blessings and impact its natural environment are the region's "industries" and "lifestyles." From here, we will organize the relationships between nature and a region's industries and lifestyles, clarify the risks and opportunities arising from these relationships. We will then consider countermeasures.

- Industry: Agriculture, forestry, and fisheries; service industries including manufacturing, distribution, and tourism
- Lifestyle: Activities and daily life in households, schools, and recreation, and their foundations

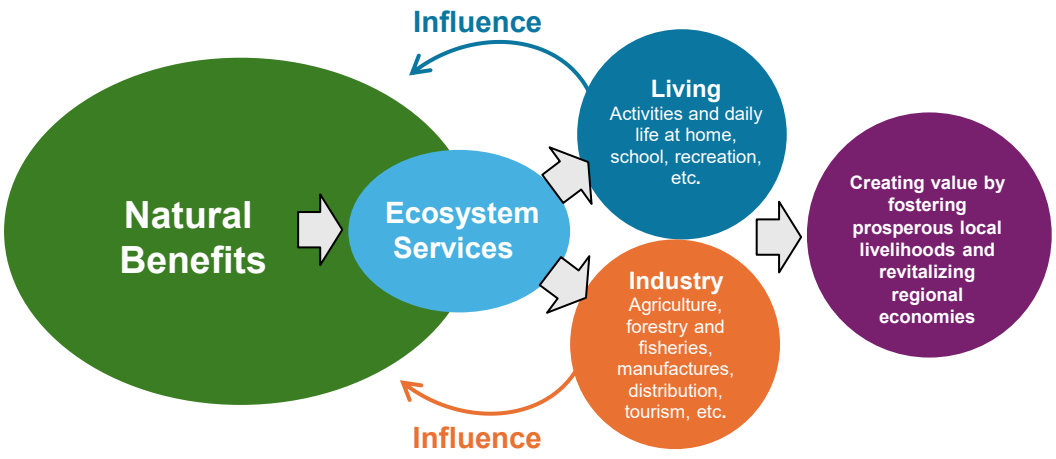


Figure 5: Relationship between nature, industry, daily life, and value creation in the region

From this stage onward, guidance from individuals with expertise in biodiversity and natural capital is recommended. Proceeding with expert guidance will help to ensure the development of accurate and effective plans. The following content also assumes that experts understand these points, explain them clearly to the team, and provide guidance. For difficult parts, be sure to seek expert advice.

1.3.1 Understanding the Basic State of the Region and Nature

To advance nature-positive initiatives in your region, you first must gather basic information about the region and understand the state of the natural environment. Basic regional information can be gathered by referring to white papers published by national and regional governments, consulting regional materials held in libraries, and conducting interviews with long-time residents of the area. At this stage, detailed surveys are not necessary; a basic understanding is sufficient.

○ Regional Information

Item	Content
• Climate (temperature, precipitation)	• Japan Meteorological Agency “Historical Weather Data,” municipal environmental white papers
• Topography (plains, mountains, developed land, water use)	• Geospatial Information Authority of Japan “Topographic Maps/GSI Maps,” municipal urban planning maps
• Land-Use Changes (historical conditions)	• Ministry of Land, Infrastructure, Transport and Tourism “Land Use Trends Survey,” historical maps/aerial photographs (geospatial information authority/municipalities), local history museums
• Upstream and Downstream Municipalities of Rivers Flowing through the Area, Water Source Areas, Bay Names	• Watershed maps (Ministry of Land, Infrastructure, Transport and Tourism, local governments), waterworks bureau websites, river offices, Geographical Survey Institute maps
• Existence of Nature Conservation Areas	• Ministry of the Environment’s List of Natural Environment Conservation Areas, official websites of national parks and Ramsar sites, Ministry of the Environment’s List of Certified Sites for Coexistence with Nature, Ministry of the Environment Biodiversity Center’s Map of Designated Conservation Areas, Ministry of the Environment’s Biodiversity Visualization Map, Ministry of the Environment’s Environmental Assessment Database System (EADAS), local government environmental policy materials
• Presence of Globally Important Agricultural Heritage Systems (GIAHS) / Japanese Agricultural Heritage Sites	• Ministry of Agriculture, Forestry and Fisheries’ GIAHS Official Page, FAO (Food and Agriculture Organization of the United Nations)
• Water Intake Locations for Tap Water	• Local water bureau/water supply entity, municipal water supply annual report
• Destination of Sewage Treatment Outflow (rivers/bays)	• Local sewerage bureau/treatment center, municipal sewerage improvement plan

• Local Industries and Daily Life (e.g., farmland, factories, schools)	• Municipal statistical reports and industrial promotion plans, chambers of commerce, agricultural cooperatives, boards of education, city/town/village official websites, local school official websites
• Current and Historical Industrial Shifts (including classifications)	• Ministry of Internal Affairs and Communications Statistics Bureau “Industrial Classification,” municipal industrial histories/chronologies, national censuses/economic censuses

It’s also important to confirm the state of the natural environment. First, team members should list observations at a personal level about how they feel the local nature has changed compared with before. At this stage, the goal is simply to grasp the overall picture, so detailed data are not yet necessary. If experts knowledgeable about ecosystems and natural resources can participate and provide advice or guidance, the team can more accurately understand the state of nature in the region.

○ Natural Environment Information

Item	Content
State to Be Assessed	• Maps showing the location and area of forests/grasslands, factories, farmland, schools, research institutes (public/private), parks, rivers, known groundwater sources, nature reserves, etc., along with their current status
Primary Methods	• Publicly available online maps, Ministry of the Environment’s Biodiversity Visualization Map, etc.

○ Methods for Assessing the State of the Natural Environment

Item	Content
Main Indicator Examples	• Changes in ecosystems: whether the richness of forests and rivers has decreased, recovered, or increased/decreased overall • Land condition: changes in land-use patterns, area, and quality of rice paddies, fields, forests, residential areas, etc. • Landscape integrity and connectivity: whether forests, rivers, wetlands, etc., are connected in a healthy way, providing pathways for organisms to move freely • Species extinction risk and trends: whether local species are declining toward extinction, or whether their numbers are increasing or decreasing
Main Methods	• Visual surveys, environmental DNA, satellite data, etc.

Additionally, if areas are clearly already damaged or conservation activities for rare species are underway, this information is recorded.

1.3.2 Identifying Connections with Nature

The next step is to identify points of contact—where and how “nature” relates to “local industries and livelihoods.” As outlined in section1.3, analysis focuses primarily on two areas: (1) “industries” (including agriculture, forestry, fisheries, manufacturing, distribution, tourism, and other service sectors) that utilize (depend on) natural resources and potentially impact nature; and (2) “livelihoods” (activities and foundations of life in households, schools, leisure, etc.).

○ Mapping Items

- Locations of local industries and activities
- Water sources used by each industry and activity, and locations of farmland and forest resources
- Locations of water intake points, wastewater treatment plants, and discharge points
- Locations of nature conservation areas, nature coexistence sites, agricultural heritage sites, etc.

As mentioned earlier, information on nature conservation areas and nature coexistence sites can be confirmed by using the Biodiversity Visualization Map provided by Japan’s Ministry of the Environment. For more detailed analysis, tools such as ENCORE for industry-specific dependencies and impacts and WWF Risk Filter for the natural state of locations can also be utilized. However, operating these tools and understanding the results obtained requires specialized knowledge. Therefore, when you are using them, seek support from knowledgeable experts.

A detailed analysis of how local industries and livelihoods depend on nature and how these activities impact nature (dependency and impact) will follow later. For now, let’s consider the following general levels as a reference point.

○ Examples of the Relationship Between Nature and Industries/Activities

- Semiconductor factories and rice paddies use large amounts of water.
- Plating factories, which pose a risk of river pollution, are located near rivers or in areas with groundwater.
- A cherry-blossom-lined avenue, where residents look forward to the full bloom, receives abundant sunlight and is being considered as a suitable site for a mega-solar plant.

1.3.3 Identifying Factors Affecting Nature

List the causes of both negative and positive impacts that local industries and lifestyles have on nature. By using data such as the “state of the natural environment” obtained in the previous section as a reference, divide these into direct and indirect factors. Consider the potential impacts while anticipating events likely to occur in the region in the near future.

○ Direct Factors

Item	Description
Use of Place	• Changes in ocean/coastal use, conversion of forests and wetlands into factories, firming up of rice field borders, etc.
Climate Change	• Changes in maximum/minimum temperatures, daily temperature range, and precipitation
Pollution	• Industrial and domestic wastewater, pollution caused by natural disasters
Natural Resource Exploitation	• Deforestation, conversion of grasslands to plantations, poaching and illegal extraction of rare species
Invasive Non-native Species	• Introduction of exotic plants, fishes, reptiles, etc.

○ Indirect Factors

Item	Description
Population Fluctuations	• Expansion of residential areas, increase in abandoned farmland
Industrial Structure Change	• Decline in agricultural and fisheries populations • Changes in the value of plants and other resources

For each local industry (e.g., agriculture, manufacturing) and aspect of life (e.g., daily living, education, leisure) identified in “1.3.2 Identifying Connections with Nature,” list the potential positive and negative impacts these may have on nature, using the above list as a reference.

○ Example Listing

Item	Description
Examples of Negative Impacts	• Abandoned of artificial forests increases the frequency of landslides and other disasters caused by torrential rains. • Water fee rates rise as water-intensive factories are relocated (lack of funding to maintain water infrastructure).
Examples of Positive Impacts	• Restoration of coastal seaweed beds increases seafood resources. • Local factories are certified as nature-friendly sites. • Companies revitalize abandoned farmland as corporate farms.

When expert support is available, online tools such as ENCORE for analyzing the relationship between nature and industry and WWF Risk Filter for assessing a site’s natural state can enable more detailed analysis.

At this stage, it is sufficient to list all potential impacts within the scope of what can be identified, regardless of the likelihood of occurrence or the magnitude of impact if they do occur. The team will revisit this list as needed during the course of its deliberations.

1.3.4 Identifying Natural Benefits (Ecosystem Services)

Consider what constitutes the “natural benefits” that are important to the region. We rely on and are supported by nature’s blessings every day. For example, tap water is supported by rivers and groundwater, while crops in fields and farms grow thanks to the work of soil and insects. Forests

clean the air, rivers and oceans nurture fish, and *satoyama* landscapes and parks provide places to heal the mind.

These benefits (mechanisms and functions) that nature provides to our industries and daily lives are called “ecosystem services” and are generally classified as follows:

○ Ecosystem Services

Item	Description
Provisioning Services	• Directly useful for daily life, such as food, drinking water, water for agriculture and industry, plants used as raw materials for medicine, timber from forests, ornamental flowers and animals
Regulating Services	• Water source conservation; air and water purification by forests and rivers; vegetation helping to prevent soil erosion, landslides, and floods; pollination by insects and birds; pest control by beneficial insects
Cultural Services	• Recreation and tourism through beautiful scenery and natural landscapes; sources of culture and art; learning and educational opportunities utilizing nature
Foundational Services	• Supporting diverse life by providing habitats and hunting grounds, forming fertile soil through fallen leaves, and decomposing organic matter via soil microorganisms

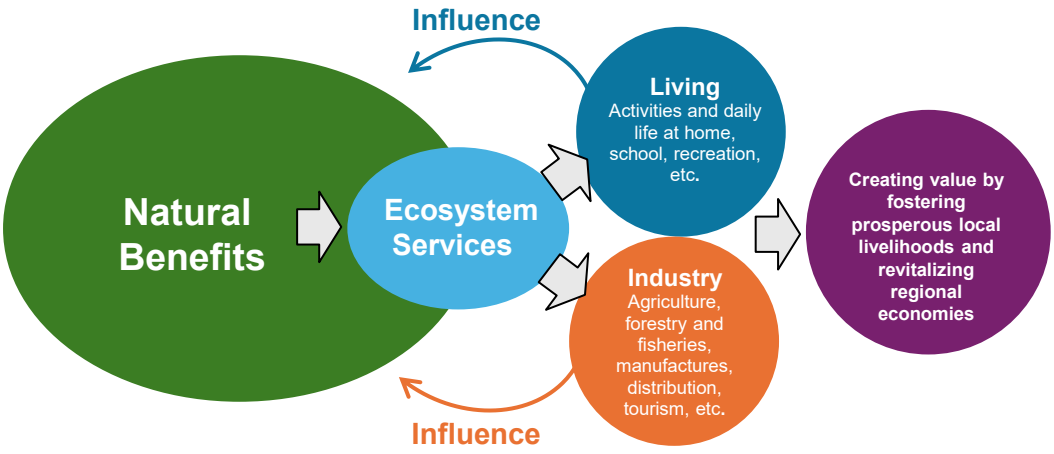
For each local industry (e.g., agriculture, manufacturing) and aspect of daily life (e.g., schools, housing, leisure) identified in section 1.3.2 Identifying Connections with Nature, determine which ecosystem services (benefits from nature) support them. At this stage, it is sufficient to list them within the scope currently identifiable, regardless of the magnitude of the benefits or the degree of impact. Revise the list as necessary as the review progresses.

1.3.5 Identifying Dependencies and Impacts

On the basis of the information gathered up as far as the previous section:

- Dependencies: Identify which natural benefits (e.g., water, forests, farmland) support the region’s industries and daily life.
- Impacts: List examples of how industrial and daily activities positively impact the natural environment or negatively impact (or have the potential to negatively impact) it.

A key characteristic of nature is that its resources and ecosystem services vary by location. For example, a region’s water supply relies on specific rivers or groundwater sources. If these become unusable, no alternative can be found. In such cases, not only would it become difficult to sustain industries such as agriculture and manufacturing, but also substantial disruptions could occur in local citizens’ daily lives, education, leisure activities, and more. For example, large-scale deforestation without proper consideration not only destroys habitats for living creatures but also risks triggering natural disasters, such as landslides during heavy rains.



Re-stated: Figure 5 Relationship between nature, industry, daily life, and value creation in a region

Recall various forms of “industry” and “livelihood,” consider what aspects of nature they depend on, and examine the negative and positive impacts they have on nature. Organize your findings into a list like the one that follows:

○ Examples of Dependencies and Impacts

Item	Description
Example of Dependencies	• Local drinking water is supported by abundant groundwater. • Wetlands mitigate flooding from torrential rains. • Forests and green spaces mitigate the summer heat-island effect. • Semiconductors cannot be manufactured without large quantities of clean water. • If farmland becomes unusable, alternative land may exist but crop quality declines. • Tea fields are sustained by the proliferation of pampas grass and bamboo species.
Examples of Impacts	• Failure to clean up after camping on riverbanks or beaches pollutes rivers and oceans. • Domestic wastewater is purified at treatment plants, but rainwater carries large amounts of various substances from roads into rivers, damaging river ecosystems. • Residential windbreak forests maintain diverse ecosystems. • Massive water consumption by residents and industry depletes groundwater. • Although the probability of accidents is low, malfunctions at factory wastewater treatment plants can cause severe river pollution. • When European honeybees (non-native species) escape from greenhouses, they hybridize with native species, causing “genetic disruption” and damaging ecosystems.

The concept of “dependencies and impacts” is not yet widely understood, potentially making comprehension and analysis challenging. In such cases, consider referring to descriptions of dependencies and impacts in TNFD reports from companies operating in the region or from peer companies. This may provide useful insights.

1.3.6 Risk and Opportunity Assessment

Up to this point, you have organized the natural benefits that support the region's industries and livelihoods (dependencies) and determined whether they have negative or positive impacts on the natural environment (impacts). On the basis of those findings, you will now organize the vulnerabilities (risks) and strengths (opportunities) related to nature from a "whole-region perspective."

At this stage, it is crucial to broadly grasp the risks and opportunities for the entire region without considering your own capabilities or scope of activity. Focusing solely on your own scope risks overlooking the challenges and potential for the entire region.

First, you'll take a bird's-eye view of the region's natural and social structures to grasp the overall picture. Then, in section 1.4 Setting Goals, you will identify issues that you can address and help to solve from "your perspective."

The concept of risks and opportunities is as follows:

Risks	Potential negative impacts on livelihoods and industries due to the loss of natural resources or damage to the natural environment (e.g., water sources becoming polluted and unusable, increased disasters due to deforestation, loss of tourism resources) Risks include sudden events such as natural disasters and long-term, gradual impacts such as global warming that ultimately become severe risks. Changes to laws and regulations protecting nature can also substantially affect industries and daily life; such institutional changes should also be considered risks.
Opportunities	The potential for new value and benefits to emerge in regions by protecting and utilizing nature (e.g., *satoyama* conservation activities leading to tourism and education, cleaning rivers and seas to revitalize fisheries and leisure, introducing renewable energy and in turn boosting the local economy). Opportunities also exist, such as gaining economic benefits from tourism or specialty products when nature restoration efforts gain external recognition, or earning carbon credits while restoring nature through forest conservation or seagrass bed restoration.

Let's proceed with examining risks and opportunities.

● Extracting Risks and Opportunities by Using the "Dependencies and Impacts" List

By using the list created by referring to the table titled Examples of Dependencies and Impacts in section 1.3.5, extract risks and opportunities by asking questions such as the following. (In some cases, risks and opportunities may already have been evaluated during the "identifying dependencies and impacts" stage. Even then, use the method below to discuss them again while drawing a concrete picture.)

○ Extracting Risks and Opportunities from the Dependency List

Item	Description
Questions	• What problems would arise if this natural blessing were lost? → Risk • What benefits could arise if we were to protect and utilize this natural blessing? → Opportunity
Example Answers	Example of water resource dependency • Risk: If water shortages are ignored, not only will residents struggle to secure water, but also rice paddies will lack sufficient water, leading to reduced rice yields and quality. Persistent water shortages could cause local factories to withdraw, resulting in job losses and increased water rates. • Opportunity: Implementing water source conservation activities upstream ensures the availability of drinking water and water needed by businesses. If local companies are already engaged in water source conservation, expanding these activities to include citizen participation helps residents to understand the importance of water. Additionally, well-maintained forests can become recreational spaces for citizens.

○ Extracting Risks and Opportunities from the Impact List

Item	Description
Questions	• What negative impacts on nature and the community could arise if this activity were to continue? → Risk • What new value could be created through improvements or innovations? → Opportunity
Example Answers	Example of the impacts of deforestation • Risk: Unconsidered deforestation reduces water-retention capacity and soil moisture retention, accelerating soil degradation. This leads to landslides and river turbidity during heavy rains, causing fish populations to decline and severely damaging fisheries. • Opportunity: Even in areas where problematic logging has occurred, planned restoration based on scientific knowledge and disaster-prevention expertise can enhance water-retention capacity beyond previous levels and regenerate the forest into a healthier, more fire-resistant ecosystem.

● Prioritizing Risks and Opportunities

Let’s prioritize the list of risks and opportunities identified for the entire region above.

The dependencies and impacts on nature vary in severity for industries and livelihoods. Natural resources that cannot be replaced, such as drinking water, must be protected as a top priority, because their loss would make daily life impossible. On the other hand, the impacts our activities have on nature range from minor ones that recover quickly to those causing long-term, severe damage.

At this stage, the goal is to broadly grasp the overall regional situation. Prioritize from the perspective of the entire region, not just your own viewpoint.

Generally, risks and opportunities associated with dependence are judged by the “magnitude of impact on industry and daily life” and the “availability of alternatives.” Risks and opportunities associated with impacts are judged by the “degree of natural impairment” and the “potential for

recovery.” However, what to prioritize in the region must be determined on the basis of the values of the local stakeholders.

Below are examples of how to determine priorities. Use these as a reference; establish specific criteria as needed and decide through discussions among stakeholders.

○ Example of Prioritization

Item	Description
Example of Prioritizing Risks and Opportunities on the Basis of Dependency	1. No substitute possible: Loss would render daily life or industry unsustainable (e.g., drinking water source). 2. Replacement possible but extremely costly: Alternatives exist but impose substantial economic/social burdens (e.g., using raw materials from another location is possible but expensive). 3. Replacement possible but quality declines: Switching to other means results in reduced quantity or quality (e.g., using purified groundwater with degraded water quality). 4. Relatively easy to substitute: Can be switched to other means immediately (e.g., a region with multiple tourism resources can compensate if one is lost).
Example of Prioritizing Risks and Opportunities on the Basis of Impact	1. Irreversible: Once lost, cannot be restored (e.g., species extinction). 2. Extremely difficult/long-term recovery: Takes decades to recover, such as deforestation or wetland loss. (Restoring lost wetlands is extremely difficult.) 3. Recovery possible but costly/time-consuming: Requires artificial restoration or long-term maintenance (e.g., reforestation takes time to create a forest). 4. Recoverable by natural forces in a relatively short time: Temporary water quality deterioration or small-scale vegetation changes (e.g., grasslands can be restored by mowing).

Here, you will organize “risks and opportunities” from a regional perspective, but, as mentioned earlier, comments may differ. Some may view a certain measure as an “opportunity for the regional economy,” whereas others may perceive it as a “risk to the living environment.”

For example, while some see increased tourist visits to the region because of *satoyama* maintenance as an opportunity, others perceive it as a risk, worrying about traffic congestion and loss of tranquility. Regarding forest management, while some anticipate economic benefits such as revitalizing forestry or biomass power generation, others may question the practice of not planting native species.

These differing perceptions are categorized in environmental policy discourse as “frames,” or the conceptual frameworks through which people understand and evaluate issues. Visualizing and understanding these different frames helps to avoid conflict and fosters an integrated approach that accommodates diverse values.

Figure 6 illustrates an example where project developers and residents hold different frames regarding the installation of a mega-solar plant. Similarly, in nature-positive activities, different frames exist, depending on one’s position or organization.

Visualizing stakeholders' frames at this stage and sharing different positions and perspectives enhances mutual understanding. Maintain this perspective when advancing discussions in the subsequent sections on goal setting and activity planning. (Section 1.4.4 Identifying Priority Issues introduces "scenario analysis" as a method for people with different positions to identify common issues. Please refer to and utilize this as needed.)

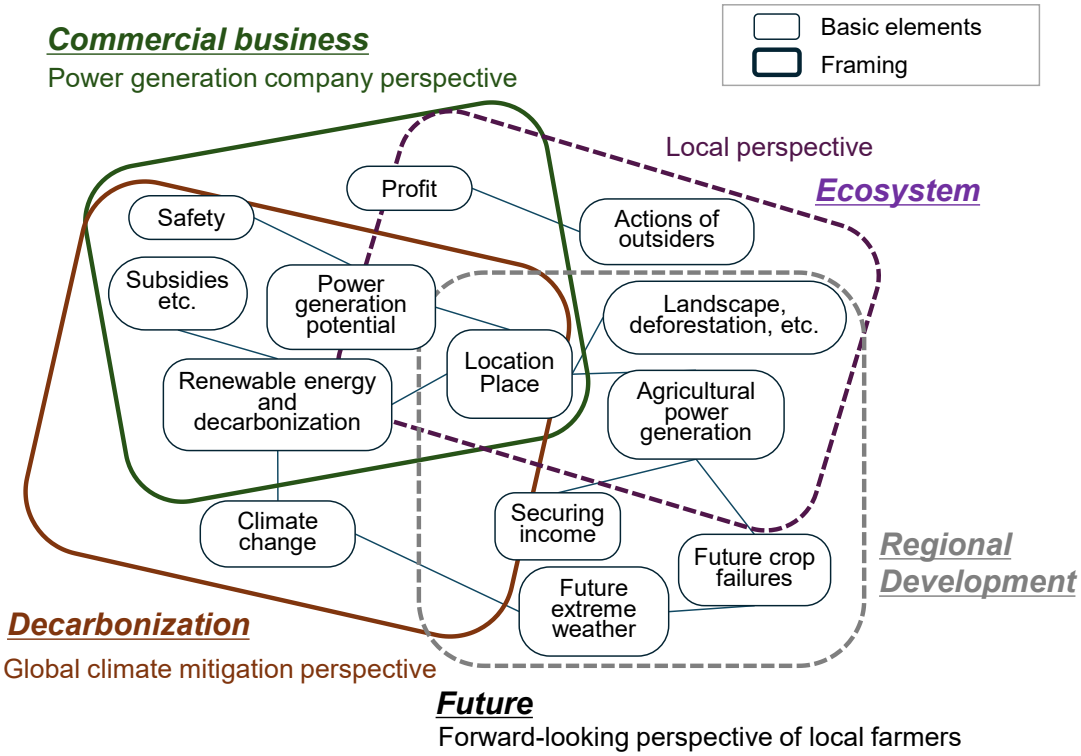


Figure 6: Discrepancies caused in arguments by "framing" in complex problems

Example: solar panel installation

(Tazaki, Fujiwara et al. 2025. The necessity of an integrated approach as a countermeasure for complex environmental problems and challenges to overcome. *Environmental Information Science*, 54(2), pp. 99–109.)

1.3.7 Aligning Stakeholder Perceptions

Thus far, you have completed a series of analyses and clarifications: Identifying Points of Contact with Nature; Specifying Factors Affecting Nature, Ecosystem Services, Dependencies and Impacts; and Risk and Opportunity Assessment. This establishes a foundation for comprehensively understanding the multifaceted relationship between nature and people within a region.

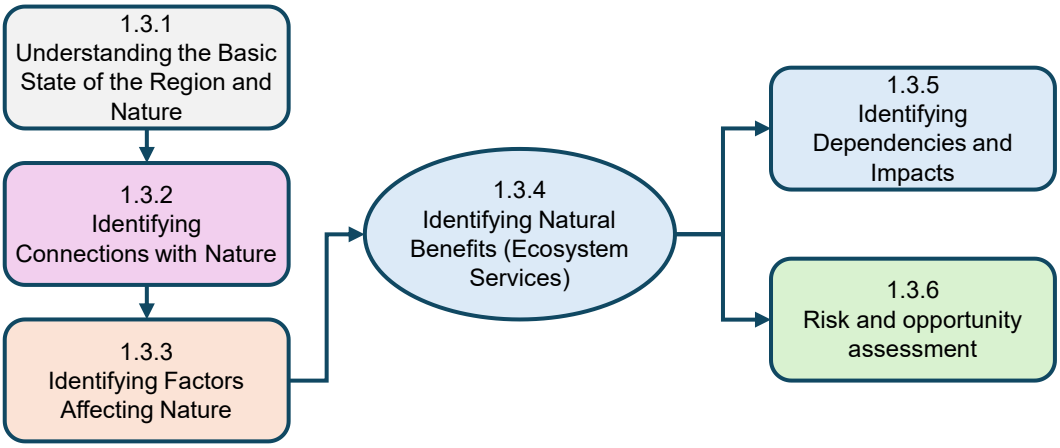


Figure 7: Relationship between nature and dependencies and impacts/risks and opportunities

On the basis of the organization and diagrams presented so far, let's prepare for the next steps of Goal Setting and Vision Formulation. In the next section, you will prioritize issues and set goals on the basis of the results of the Dependencies and Impacts and Risk and Opportunity Assessment exercises.

Thus far, you have created various lists and conducted analyses, such as examining the relationship between nature and dependencies versus impacts and risks versus opportunities. For cases where the variety and volume of lists make grasping the overall picture difficult, an example of an organizational template is provided below. There is no strict requirement to adhere to this specific format; please organize your analysis results by using a method that works best for your team.

Example Risk and Opportunity Organization Template

Industry/ Lifestyle	Dependencies on Natural Resources (Ecosystem Services)	Positive and Negative Impacts on Nature	Risk	Opportunity	Dependency	Impact Level	Priority
Example: Agriculture	Water resources, pollination, fertile soil	**Good**: Grassland maintenance **Bad**: Overuse	Yield reduction due to water shortage	Branding through regenerative agriculture	High	Medium	High
Example: Tourism	Landscape, cultural services	**Good**: Landscape conservation **Bad**: Overuse	Decline in tourism due to landscape degradation	Promotion of ecotourism	Medium	Medium	Medium
Example: Livelihood	Forest vegetation/ habitat	**Good**: Water source conservation **Bad**: Increase in bear and deer abundance (impacts on agriculture, forestry and the safety of residents)	Wildlife damage, flash floods	Green infrastructure	High	High	Medium

Once team members understand and share each other's positions and have organized the results of their analysis of the relationship between nature and dependency versus impact and risk versus opportunity, they can proceed to the next step of setting goals.

If you have support from TNFD practitioners or experts, it may be more efficient to use the TNFD LEAP (Locate, Evaluate, Assess, Prepare) approach—a practical framework for groups to organize their activities and their relationship with nature and identify risks and opportunities and the four threats to biodiversity outlined in the National Biodiversity Strategy formulated by the Ministry of the Environment (First Crisis: Threats from human activities such as development, Second Crisis: Threats from reduced human interaction with nature, Third Crisis: Threats from introduced species, Fourth Crisis: Threats from global environmental change). This guide was also developed to reflect the LEAP approach concept. Therefore, even during an analysis that incorporates the LEAP approach more strongly under expert guidance, this guide can be used as is. Please consider utilizing these methodologies as needed, while consulting with experts.

For reference, the following information is provided at the end of this document. Use it to understand how industries and daily life depend on, and impact, nature, as well as to consider specific risks and opportunities and grasp the overall structure:

Figure 16: Diagram of Impact and Dependency Pathways

- TNFD Risk and Opportunity Classification
- The “Four Crises” Threatening Japan’s Biodiversity

Figure 17: Overall Structure Diagram for Each Section in This Document.

Table 1.3 Identifying Natural Interactions, Dependencies, Impacts, Risks, and Opportunities

	What to Do	What to Avoid
1.3.1 Understanding the Basic State of the Region and Nature	• Invite appropriate experts. • Perform literature research on the region's climate, industries, land use, etc. • Conduct interviews with local residents.	• Information gathering becoming merely curiosity driven, forgetting the nature-positive approach • Using biased information sources • Lacking professional guidance
1.3.2 Identifying Connections with Nature	• Map forests, grasslands, factories, farmland, rivers, groundwater, nature reserves, etc. • Identify what agricultural land and factories produce.	• Mapping locations in a very rough and inaccurate fashion • Mapping only the sites of farmland and factories without investigating what they produce
1.3.3 Identifying Factors Affecting Nature	• Identify factors affecting nature by categorizing them into direct factors (e.g., land-use change and climate change) and indirect factors (e.g., population growth and industrial structure). • Involve individuals knowledgeable about local conditions.	• Allowing preconceptions to inform information gathering and analysis, leading to bias • Failing to analyze from a perspective spanning short- to long-term time frames
1.3.4 Identifying Natural Benefits (Ecosystem Services)	• List all ecosystem services typically categorized as such to create a comprehensive list of services present in the region.	• Considering ecosystem services from a narrow perspective, omitting ecosystem services important to other people or organizations
1.3.5 Identifying Dependencies and Impacts	• Comprehensively list the various industries and livelihoods within the region and the ecosystem services they utilize. • Also list positive impacts, such as "Grassland cultivation supports the habitat of rare grassland species."	• Assessing dependence on ecosystem services by using oneself as the subject • Assuming pollution is a thing of the past and thus neglecting to thoroughly investigate impacts on nature • Assuming that there are no positive impacts, and failing to investigate
1.3.6 Risk and Opportunity Assessment	• List risks and opportunities by considering regional industries and livelihoods, transcending participants' individual interests.	• Focusing discussions solely on negative impacts • Becoming distracted by current events and thus failing to consider the broader perspective
1.3.7 Aligning Stakeholder Perceptions	• Promote sufficient mutual understanding that different perceptions of issues exist. • Recognize the impacts on numerous stakeholders.	• Allowing insufficient time for alignment • Lacking mutual understanding regarding issue recognition • Drawing conclusions forced by those who speak most loudly

1.4 Setting Goals

It is important to establish clear **goals** that articulate why nature-positive activities are undertaken, along with a **logic model and vision** that can be explained in your own words. Base these on the connections with local nature, dependencies and impacts, and risks and opportunities identified in the preceding sections.

○ Positioning of Goals, Vision, and Logic Model

Shared Goals	Define achievable milestones that can be collectively considered and shared and are aimed at solving challenges and enhancing regional value.
Vision That Fosters Support	Clarify the desired future state underlying the goals, creating a direction that stakeholders find convincing and resonate with.
Clear and Simple Logic Model	Devise a structure that visualizes the path to achieving goals, enabling a clear understanding of the connections among the purpose, means, and outcomes of activities at a glance.

There are two approaches to setting goals, logic models, and visions:

1. Goal-Driven Approach: goal setting ⇒ verification via logic model ⇒ incorporation as vision
2. Vision-Driven Approach: vision formulation ⇒ breakdown into goals ⇒ logic model construction.

This guide presents the Goal-Driven Approach, which facilitates logical progression toward enhancing regional value and eases stakeholder coordination. However, the Vision-Driven Approach, which better reflects values, may be more suitable in some cases.

Regardless of the chosen approach, goals, vision, and logic models are interrelated, so they cannot always be organized sequentially. Therefore, it is recommended that a hybrid approach be adopted to incorporate the strengths of both. In the hybrid approach, you first envision a desired future (a tentative vision), such as “We want to bring salmon back to this river and create a local specialty product by using locally caught fish.” Next, you define this vision to set tentative goals, validate their feasibility by using a logic model, and then reset the vision on the basis of the results. Repeating this cycle refines the content into a realistic and easily shared form.

Below is a comparison between the Goal-Driven Approach and the Vision-Driven Approach, along with an overview of the hybrid approach’s methodology.

○ Comparison of Goal-Driven and Vision-Driven Approaches

Perspective	Goal-Driven Approach	Vision-Driven Approach
Suitable Patterns	• When consensus is difficult to achieve in a short time among diverse stakeholders with differing roles and responsibilities, such as citizens, businesses, and government agencies • When corporate or government participants lack decision-making authority and cannot make judgments on the spot	• When regional challenges and potential solutions are widely shared among stakeholders • When a municipality is considering initiatives such as a nature-positive declaration and wishes to envision a new regional future
Benefits	• High feasibility and effectiveness owing to logical, step-by-step development • Clarification of outcomes and pathways, making it easier to reach consensus within stakeholders' organizations	• Facilitates reflection of local culture and perspectives on nature, promoting shared values • Enhances residents' sense of participation and eases collaboration
Disadvantages	• Carries the risk that values difficult to quantify may be overlooked. • There is potential for overemphasizing logical organization, making it difficult to engender residents' support.	• Support from experienced facilitators is essential for synthesizing diverse comments. • It tends to result in abstract visions, making it difficult to translate into concrete goals.

○ Image of Hybrid approach

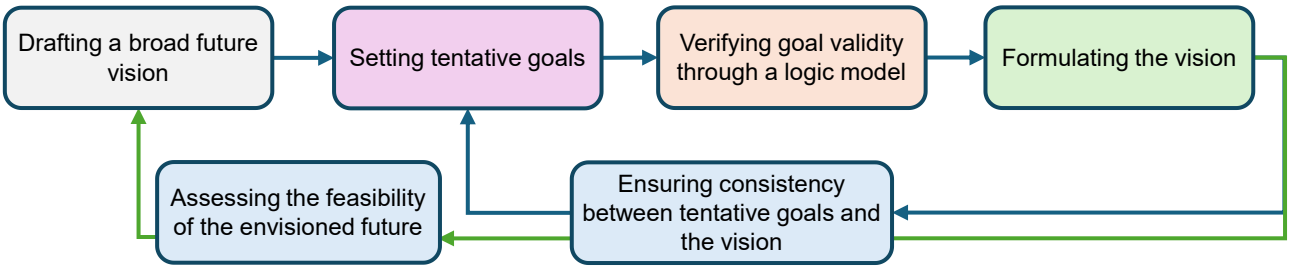


Figure 8: Hybrid approach flow

1.4.1 Establishing the Framework for Goal Setting

Although a small volunteer team with sufficient expertise can handle the analysis phase, establishing goals requires an organizational framework involving execution responsibility, decision-making, and accountability. At this stage, it is essential to clarify who takes responsibility, who makes decisions, and who drives implementation on the ground, as well as to formalize the organizational decision-making process. Differences in the framework between the analysis phase and the goal-setting phase are as follows:

○ Differences Between the Analysis-Focused Team and Organization Post-Goal Setting

Perspective	Analysis-Focused Team (Pre-Goal-Setting)	Organized Structure (Post-Goal-Setting)
Nature of Structure	Volunteer-based, small-scale team	Organization with clearly defined responsibilities
Decision-Making Method	Volunteer-based consensus	Organizational decisions based on established rules
Required Qualifications	Strong commitment to the activity and a certain level of expertise	Clarification of responsibilities, accountability, and resource allocation

When you are establishing the framework, identify the new stakeholders required for the actual activity phase and invite their participation.

Through the analysis of dependencies and impacts and risks and opportunities covered in the preceding sections, it should now be clear that the scope of the activity's subject matter, its potential impact, and the range of stakeholders requiring involvement are broader than initially anticipated. From this, specifically identify the particularly important stakeholders and formally request their cooperation or participation.

○ Examples of Stakeholders

- Government (local government, national/regional administrative bodies, organizations contracted by government)
- Companies, research institutions, NGOs, and civic groups already engaged in nature-positive activities
- Research organizations, individuals, or groups with expertise in local natural environments
- Individuals and organizations from industries (e.g., agriculture, manufacturing) and with knowledge of the aspects of life (e.g., daily living, education, leisure) deemed necessary for involvement, as determined in the previous considerations
- Individuals and organizations working with the ecosystem services analyzed when you identified the dependencies and impacts
- Individuals and organizations with knowledge of identified risks and opportunities
- Other individuals or organizations that may be impacted by the activities

Once participation from necessary individuals and organizations is secured, establish an organizational structure capable of handling goal-setting, decision-making regarding activities, resource allocation, and accountability. At this stage, use the following three organizational hierarchy examples as a reference for setting up the structure:

○ Example of Organizational Hierarchy

Organization	Content
Council	Decision-making and approval of common goals
Secretariat	Practical operations and bridging decision-making with working groups
Working Group	Thematic analysis, deliberation, and implementation

When transitioning to the implementation phase, organizations are often structured across the following four tiers. Use the following as a reference to prepare in advance, although it will not necessarily be finalized at this stage:

○ Example of Organizational Hierarchy for Implementation of nature-positive activities

Tier	Example Name	Primary Role	Example of Entity
Top Decision-Making	Nature-Positive Council	Vision, goal, and guideline decision-making, overall coordination	Local government leaders, major corporate representatives, universities, non-profits, regional representatives
Planning and Promotion	Secretariat	Planning, progress management, funding coordination	Representatives from local governments, environmental organizations, universities, and companies
Implementation	Thematic Working Groups	Thematic analysis, deliberation, and implementation	Companies, regional organizations, non-profits, Fisheries Cooperative Association, forestry operators
Advisory	Scientific Advisory Board	Scientific advice, evaluation, monitoring data management	Universities, research institutions, experts, external audit bodies

1.4.2 Appointment of Coordinators and Facilitators

To enable diverse stakeholders to move toward a common goal, appoint appropriate coordinators or facilitators, or bring them in from outside.

Balancing stakeholder interests is a distinct function from decision-making and requires specific capabilities. Particularly regarding issues of dependencies and impacts and risks and opportunities related to nature, stakeholders often hold vastly different positions and values. Therefore, a mediator is essential to build a shared understanding of goals and action plans while engaging stakeholders without damaging trust. Securing suitable coordinators or facilitators for this role is challenging owing to the high levels of expertise and experience required. However, securing the right people early is crucial to prevent stagnation in activities and divisions caused by misunderstandings.

If suitable candidates exist within the review team, they may assume this role. If not, consider selecting individuals from among those in leadership positions within the community, NGO staff active locally, or researchers. Note that the coordinator and facilitator roles may be held by the same person or divided among multiple individuals.

○ Roles, Responsibilities, and Skills

Role	Primary Responsibilities	Skills
Coordinator	• Connecting stakeholders (people/organizations) • Facilitating the sharing of resources and information • Facilitating coordination and collaboration among stakeholders	• Coordination and negotiation • Network-building • Management
Facilitator	• Hosting meetings and workshops • Smoothly advancing dialogue and discussions • Drawing out participants' comments and maximizing goal achievement • Supporting consensus building	• Communication • Neutrality and fairness • Facilitation techniques

1.4.3 Confirming Resources (Activity Resources)

Before setting goals or visions, confirm the necessary resources (e.g., human resources, financial resources) to verify whether the plan is truly feasible.

Once dependencies and impacts and risks and opportunities are clarified, it may become apparent that the initially planned activity level is insufficient, requiring a restructuring of human and financial resources. Alternatively, it may become clear that the activity could have a greater-than-expected impact on the local community or industry, necessitating coordination prior to any hasty or arbitrary action.

It's important to avoid the stalling activities midway owing to resource shortages or loss of the trust of the community. Before proceeding with planning, pause to confirm the necessary resources. Reevaluate the scope of activities, response levels, requests for cooperation, and stakeholders requiring prior understanding, and take appropriate action.

○ Confirmation Points

Resources	Description
Human Resources	Personnel possessing local knowledge, experience with similar activities, communication skills, and specialized knowledge in accounting, law, engineering, civil engineering, science, etc. (or access to such personnel if needed)
Financial Resources	Fees for conducting analyses, activity expenses, venue costs, publicity expenses
Structure	Establishment of governance; building relationships with government, businesses, and NGOs
Government and Local Industry	Alignment with administrative goals and corporate policies, coordination with local communities
Authority and Rules	Land ownership, water rights, local customs and rules

1.4.4 Identifying Priority Issues

In section 1.3.6 Risk and Opportunity Assessment, you organized the importance of risks and opportunities from a community-wide perspective based on the region's dependencies and impacts on nature, prioritizing what could be major factors of change for the community.

Moving forward, under the newly established framework, you will use these results to examine the priority of the issues you should actually address from "**own perspective**" of regional

stakeholders. Although prioritizing risks and opportunities and prioritizing issues are similar, their purposes differ, as follows:

Prioritizing Risks and Opportunities (1.3.6)	Identify which elements substantially impact the region's nature, industries, and livelihoods from a "region-wide perspective." Prioritize the "importance of phenomena" as risks and opportunities to enable you to understand the region's overall situation.
Prioritizing Issues (This Section)	Discuss from individual stakeholders' "own perspectives" which issues are manageable and where the focusing of resources will contribute most effectively. Determine your "direction for action."

By separating these two steps, you can clearly distinguish between items that are important for the community but beyond your capacity to address and challenges that your team can realistically tackle and help solve effectively.

Reshare the lists of dependencies and impacts and risks and opportunities identified through previous analysis among stakeholders. Confirm that there are no gaps in understanding, including among newly added members. Decide as a group which issues to tackle. The general procedure for advancing this consideration is as follows:

○ Procedure for Identifying Priority Issues

1. Issue Extraction
   Identify specific issues you can tackle from the lists of "dependencies and impacts" and "risks and opportunities."
2. Feasibility Assessment
   For each issue, examine whether the necessary resources (personnel, funding, time) and technical conditions can be met.
3. Effectiveness Assessment
   Evaluate the expected level of improvement or contribution to the local community and natural environment through the addressing of the issue.
4. Determining Priority
   Combine "feasibility" and "level of impact" to classify priorities as high, medium, or low.
5. Consensus Building
   Discuss among stakeholders and reach agreement on the final priority order, taking into account differences in values and positions.

○ Identifying Issues from a Long-Term Perspective

Focusing on the above steps alone risks losing a long-term perspective. Nature-positive activities generally require a long time from initiation until visible effects become apparent. When challenges are being set, it is necessary to consider the potential gap between current and future challenges and to select challenges that look toward a "possible future" decades ahead.

Furthermore, as mentioned in 1.3.6 Risk and Opportunity Assessment, diverse industries and ways of life exist within regions. Consequently, a narrow-minded approach to issue-setting may make it difficult for multiple stakeholders to align on the key issues (materiality) that should be strategically prioritized.

Scenario analysis is an effective method for overcoming stakeholder differences and fostering constructive discussions from a long-term perspective. This approach, which is also recommended by the Task Force on Climate-Related Financial Disclosures and TNFD, involves presenting multiple “possible futures (scenarios)” spanning over 20 years into the future and, together with stakeholders, comparing and examining the risks and opportunities associated with each scenario.

Conducting a scenario analysis requires guidance from an experienced facilitator, as outlined in 1.4.2 Appointment of Coordinators and Facilitators. However, even without experts, imagining and examining “possible futures” decades ahead holds substantial value. Approaching this process as a reference, even without strictly following formal scenario analysis methodology, remains highly useful. To the extent possible, it is recommended that the following be used as a reference to confirm whether the issues identified in the “Procedure for Identifying Priority Issues” remain appropriate from a long-term perspective.

Specifically, consider scenarios such as the following:

- negative scenarios you hope will not occur
- very successful positive scenarios.

You will examine how regional industries and livelihoods would be affected if each scenario were to materialize. Rather than evaluating the “probability of a crisis occurring,” as in traditional risk assessment, this approach assesses “whether the team could respond if the event were to occur” and reflects that in your strategy.

Proceed through the following steps. In each step, strive to consider matters from the perspective of the entire region, rather than solely from the standpoint or relationships of your own organization.

○ Example of Scenario Analysis

1. Envision multiple “possible futures” for the region 20 years (or more) from now, such as changes in population, impacts of climate change, and shifts in the number of businesses.
2. Discuss how key ecosystem services would change if these futures were to materialize and whether substantial damage to the natural environment is likely.
3. When substantial impacts on ecosystem services occur, you must consider whether local industries and livelihoods can be sustained.
4. Similarly, discuss whether industries (such as agriculture and manufacturing) and livelihoods (including daily life, education, and leisure) could be sustained if the natural environment were markedly degraded.
5. On the basis of these future scenarios, you will work with stakeholders to explore ways to reduce risks associated with “dependence” on ecosystem services and the potential for alternatives through other means.

Strive to think and discuss issues from a whole-region perspective. TNFD’s scenario analysis recommends depicting and analyzing worldviews for each of the four quadrants formed by combining two axes. By envisioning “possible futures” decades ahead, you can transcend current positions and immediate interests to identify and share risks and opportunities that may become common in the future.

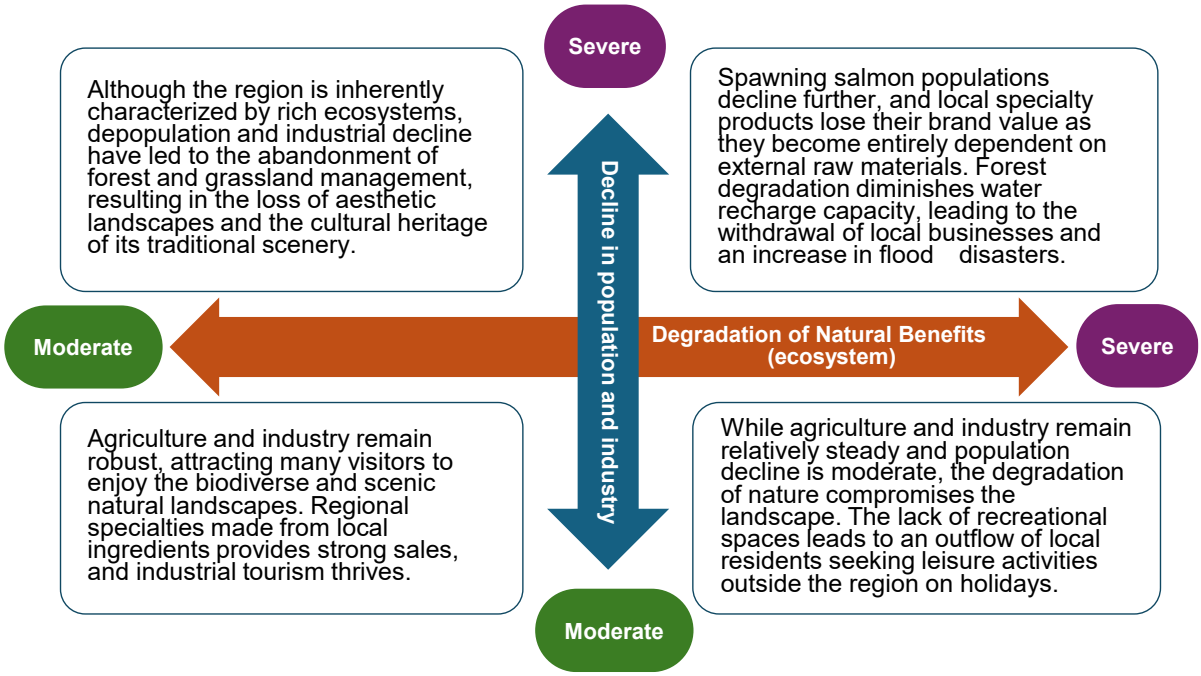


Figure 9: Example of scenario analysis

1.4.5 Setting Targets and Approaches

After identifying challenges by assessing dependencies and impacts or risks and opportunities, define the natural environment to protect and clarify “what,” “where,” and “how” you want to change.

With regard to climate change, the straightforward causal relationship between reducing greenhouse gas emissions and curbing warming makes goal setting relatively easy. However, the natural environment changes through the complex interplay of many elements, making it impossible to state definitively that “doing XX will definitely improve the situation.” For example, water quality regulations reflect this complexity by being set as company-specific wastewater discharge standards rather than direct regulations such as “reduce river pollution by XX%.” Similarly, in nature-positive initiatives, the state of the natural environment can sometimes be directly targeted as a goal, whereas at other times it can be represented only through indirect indicators.

The Pressure-State-Response Framework, which is widely used in natural capital valuation, offers a method for organizing such complex challenges. It is generally represented as shown below (Figure 10).

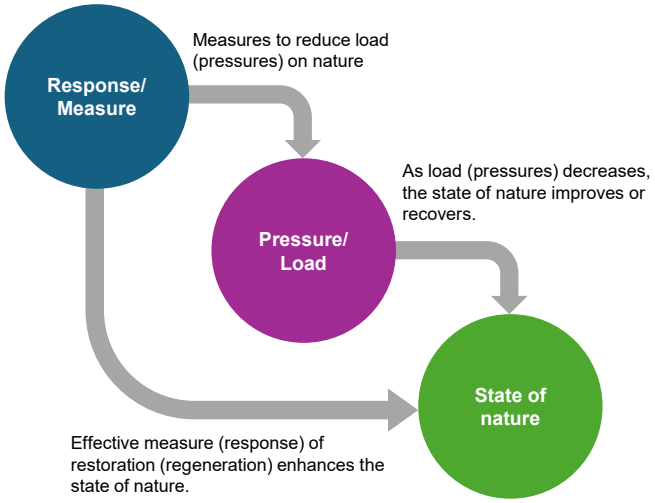


Figure 10: Diagram of the Pressure-State-Response Framework

On the basis of this framework, three types of nature-positive goals can be considered. Any of the types is acceptable as long as it fits the region, industry, and way of life. By using the diagram above and the table below (Goal Types) as references, consider “where it is located,” “which natural elements it targets,” and “what and how you want to change.”

○ Goal Types

Type	Description	Example
Goals to Improve the State of Nature (State Goals)	Improve the state of nature itself, such as the number of forests, wetlands, and living creatures.	Increase the habitat area by 10% compared with that in 2020.
Goals to Reduce Negative Impacts (Pressure Targets)	Reduce impacts from human activities such as deforestation and water pollution.	By 2030, eliminate the use of raw materials that destroy forests.
Goal to change approaches (Response/Operational Goals)	Review procurement and production methods.	Switch all raw materials to those collected under sustainable forest and plantation certification.

1.4.6 Consideration of Global Goals

Consider aligning your team’s goals with the international goals outlined in the Kunming–Montreal Global Biodiversity Framework and the UN’s Sustainable Development Goals.

Aligning local activities with these global goals enhances external credibility and fosters pride among participants. As national governments, local authorities, and businesses also aim to achieve these goals, demonstrating alignment increases the potential to secure funding and support for your activities.

○ Alignment with the Kunming–Montreal Global Biodiversity Framework

Target Number	Example Name	Example Initiatives
3	Conserve at least 30% of terrestrial and marine areas (30 by 30: International goals adopted at COP15 in 2022)	• Acquiring certification as a Ministry of the Environment “Nature Coexistence Site”

15	Require companies and financial institutions to disclose nature-related risks, dependencies, and impacts	• Collaborating with local companies and financial institutions on nature-positive activities • Supporting corporate TNFD disclosure
16	Promote sustainable consumption and production, halving the global consumption footprint	• Obtaining forest certification (FSC®; Forest Stewardship Council, others) • Obtaining aquaculture certification (ASC; Aquaculture Stewardship Council, others) • Promoting forest resource utilization, introducing organic and regenerative agriculture
18	Identify subsidies and incentives harmful to biodiversity and phase them out or reform them	• Clarifying the side effects of municipal subsidies and regulations
19	Substantially increase funding mobilization for biodiversity	• Adding value to agricultural products that contribute to enhancing biodiversity • Introducing blue carbon credits

○ Alignment with Sustainable Development Goals

Goal Number	Example Name	Example Initiatives
14	Conserve and sustainably use the oceans, seas, and marine resources	• Coastal and river cleanup activities • Proper treatment of domestic wastewater • Seagrass bed and tidal flat　restoration activities
15	Protect the richness of the land	• Protection of endangered species, lethal control of non-native species • Forest activities such as thinning and reforestation • Revitalization of abandoned farmland and urban greening • Cooperation in wildlife damage prevention • Revival of traditional farming methods and native species

1.4.7 Consideration of Scientific Evidence

To establish reliable, achievable goals, you should consciously incorporate scientific evidence appropriately. Nature-positive goals cannot achieve sufficient results or gain societal trust unless inexperienced members logically clarify “why the activity is necessary” and “why that level of activity is required.” Expert involvement is essential to consistently guide the process from evaluation to goal setting using scientific knowledge and data.

Specifically, this necessitates conducting field surveys by using established scientific methods—such as assessments of forest cover, land-use change, water quality, soil conditions, indicator species habitats, and landscape connectivity—alongside the use of new observation technologies such as satellite data, environmental DNA, and acoustic monitoring. It is crucial to perform statistically reliable analyses on the variety of data obtained and to logically derive the current state and direction for improvement.

Although scientific approaches such as Science-Based Targets for Nature are proposed for target setting, they are still evolving. The question of whether they should be applied should be considered with advice from experts who understand the scientific framework.

1.4.8 Considering Better Priorities

To achieve better nature restoration and recovery, your team must determine which goals should be prioritized. Setting goals on the basis of “what seems feasible” risks unintended consequences and other societal challenges, as well as the wasteful consumption of valuable time and effort. Therefore, consciously applying better prioritization during the goal-setting stage is crucial for achieving appropriate nature-positive outcomes.

At the beginning of this guide, we introduced the AR3T Action Framework as a framework for contributing to nature-positive outcomes through responsible actions. Underpinning this approach is the Mitigation Hierarchy, which was originally proposed as a principle for maintaining the negative impacts of infrastructure development, industrial activities, urban development, and similar actions on the natural environment through a step-by-step process: “avoidance → reduction → restoration → compensation.”

This principle requires you to consider the application of steps ① to ④ below in ascending order, proceeding to the next step only when the preceding one cannot be applied. For example, consider a project involving forest clearing. First, assess whether the logging is truly necessary. If alternatives exist that avoid logging altogether, the impact on nature can be completely avoided. Even when logging is unavoidable, carefully selecting the logging sites can minimize impacts on ecosystems and risks like landslides.

Setting goals without conducting this step-by-step analysis and evaluation of risks not only can lead to wasteful activities that fail to achieve appropriate outcomes but also can potentially result in impacts on nature and society that could have been avoided.

Set goals that reduce impacts on nature and society as much as possible by sequentially considering steps ① to ④ outlined below.

> The Mitigation Hierarchy is a fundamental principle for reducing impacts on nature in the order: Avoidance → Minimization → Restoration → Compensation. Setting goals or undertaking activities without considering this principle risks insufficient effectiveness and potential negative impacts on nature elsewhere. Therefore, it is important to proceed with this principle in mind. However, understanding and implementing this hierarchy can be challenging for those without experience. Therefore, it should be implemented with the support of appropriate facilitators or experts with knowledge of natural capital restoration.

○ Mitigation Hierarchy

Step	Response
④ **Offset / Compensate**	Conducting conservation activities elsewhere to compensate for negative impacts (residual impacts) that remain after the implementation of steps 1 to 3 (e.g., producing seedlings from the original forest during logging and planting them elsewhere, establishing a biotope after factory construction)
③ **Restore / Rehabilitate**	Implementing measures to restore the affected area to a state as close as possible to its original condition, even if full restoration is difficult (e.g., reforestation after deforestation, grassland restoration on the topsoil layer of a final disposal site)
② **Minimize**	Reducing the scale, duration, and intensity of unavoidable negative impacts to the greatest extent possible (e.g., shortening road-construction periods, reducing logging areas in forest development)
① **Avoid**	Ceasing current activities or future planned actions to prevent negative impacts from occurring in the first place (e.g., relocating development plans for forests with endangered species to non-problematic areas, reconsidering the conversion of soil to concrete-ridges in paddies, discontinuing the use of black plastic mulch in farmland)

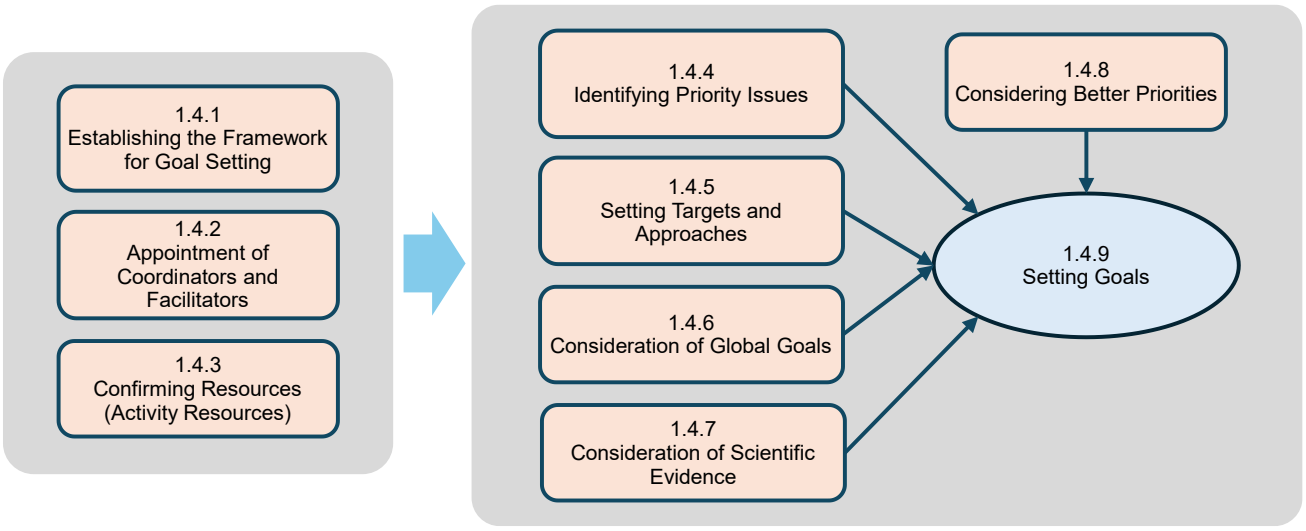


Figure 11: Diagram of goal-setting relationships

1.4.9 Setting Goals

On the basis of the results of the review, set goals together with stakeholders. The process described so far is illustrated below.

Setting a complete set of goals right away is not easy. Generally, teams proceed by using the Forecast Approach and/or Back-casting Approach, as outlined below. Rather than rigidly adhering to either approach, move between them as activities progress, gradually refining your goals step by step.

○ Approach to Goal Achievement

Step	Response
Forecast Approach: Start with what you can do now	Set broad goals based on what is foreseeable from the current situation. As activities progress and various aspects become clearer, refine these goals into more specific targets with concrete metrics and deadlines.
Back-casting Approach: Working backward from the desired state	Set goals in chronological order by working backward from the desired future state you wish to achieve. By tracing back from the goal, the necessary steps and preparations become clearer.

Up to this point, we have analyzed and considered multiple aspects of setting goals: ① defining the target and approach, ② confirming alignment with global goals, ③ setting the baseline, and ④ considering prioritization. By using the steps below as a reference and with the support of a facilitator, proceed flexibly with goal setting.

○ Goal-Setting Procedure

① Reaffirm and deepen your understanding of the relationship between the region and nature.

② Discuss the natural elements to be protected and form a shared understanding.

③ Determine the direction and type of goals (state goals, pressure goals, response / operational goals).

④ Set specific goals and share them among stakeholders.

The following are examples of nature-positive goals implemented in actual regions. Use these as references when setting your own goals.

○ Examples of Regional Goals

Activities	Goal
Toyooka City: Creating an Environmental Culture that Nurtures Storks	• Expanding the area of habitat where storks can breed naturally • Implementing agricultural product branding and economic contribution to the region
Iida City: An Environmental and Cultural City Living with *satoyama*	• Increasing the forest management rate and thinning area within the city • Implementing several environmental education and community-participation conservation activities
Shimokawa Town: Realizing a Regional Circular Symbiotic Area Centered on Forests	• Increase of Wood biomass energy utilization rate • Enhancing the local economic circulation rate (job creation through forest resource utilization)

Scenario Analysis

TNFD Scenario Analysis Guidance (https://tnfd.global/publication/guidance-on-scenario-analysis)

> "Unlike climate-related scenario analysis, which often uses quantitative pathways, TNFD encourages organizations to adopt an exploratory approach, using qualitative narratives of different plausible futures to identify and assess nature-related risks and opportunities. Scenario analysis should be participatory, involving relevant stakeholders, and iterative, supporting continuous learning and adaptation."

Mitigation Hierarchy

IUCN Biodiversity Offsets Policy, 2016 (https://tnfd.global/publication/guidance-on-scenario-analysis)

> "The mitigation hierarchy is a sequence of steps to help manage biodiversity risk: avoid, minimize, restore, and offset. The aim is to achieve no net loss of biodiversity, and preferably a net gain."

Table 1.4 Setting Goals

	What to Do	What to Avoid
1.4.1 Establishing the Framework for Goal Setting	• At this stage, establish appropriate organizational regulations and clarify roles and responsibilities. • Looking ahead to future activities, identify personnel gaps in the ideal organization and begin recruitment.	• Intentionally, not creating written rules because defining the division of roles would create friction within the team
1.4.2 Appointment of Coordinators and Facilitators	• Through various networks, invite individuals with proven track records elsewhere to join.	• Rather than seeking coordinators or facilitators, asking the most influential members within the team to take the lead
1.4.3 Confirming Resources (Activity Resources)	• Confirm human and financial resources. • If resources are insufficient, scale the activity to fit available resources or break it into steps.	• Setting goals on the basis of the simplistic assumption that human resources will materialize over time, without first confirming their availability • Postponing aligning goals with local government objectives
1.4.4 Identifying Priority Issues	• As this requires specialized knowledge, seek guidance from experienced personnel at local companies. • Outsource this part to a consultant.	• Owing to difficulty in finding personnel with the necessary understanding, proceeding to use traditional methods • Not conducting complex deliberations owing to their time-consuming nature
1.4.5 Setting Targets and Approaches	• Understand the natural relationship of “measures → pressure → state” and decide through discussions which part is realistic to target.	• Because of difficulty in finding personnel with the necessary understanding, proceeding to use traditional methods
1.4.6 Consideration of Global Goals	• Refer to targets such as the Kunming–Montreal Global Biodiversity Framework and establish targets consistent with them.	• Believing it is impossible to align local goals with global goals, and set goals by respecting the opinions of their own team without consulting experts
1.4.7 Consideration of Scientific Evidence	• Establish targets that are based on advice from academics and experts with knowledge of natural capital guidance.	• Assuming that alignment with global goals is impossible and setting targets based on team comments without consulting experts
1.4.8 Considering Better Priorities	• Understand the mitigation hierarchy and prioritize activities accordingly.	• Starting with what seems feasible without considering the priority order of ①avoidance, ②minimization, ③restoration, ④compensation.
1.4.9 Setting Goals	• Set objectives that fully reflect the above analysis. • Discuss the goals until participants are satisfied before finalizing.	• Deciding on simplistic goals midway without sufficient analysis. • Entrusting everything to experts.

1.5 Establishing the Logic Model and Vision

In addition to goal setting, your team must formulate a logic model and vision that can be explained in your own words. Proceed in a way that ensures stakeholders are convinced and feel engaged. The difference between goals and vision is as follows:

- Goal (Target): A clear state expressed numerically or as “xx becomes XX”
- Vision: Values and future outlook

First, use the logic model to verify whether the goals set so far are truly achievable and will lead to solving problems and enhancing community value. Then, outline and share a vision that indicates the overall direction of the activities. Clarifying these elements lays the foundation for translating them into concrete action plans in the next chapter about activity planning and preparation. (As mentioned earlier, the logic model and vision are interrelated with the goal setting in the previous section. Therefore, depending on the situation, it is acceptable to adjust the order of these steps or proceed with them simultaneously.)

1.5.1 Verifying Goals Through Logic Model Development

To confirm that the set goals are realistic and will lead to the solving of challenges and the enhancing of regional value, create a logic model. The logic model is a framework for systematically organizing and visualizing what activities will lead to what outcomes and social impacts in nature-positive initiatives. The sequence of a logic model clearly illustrates the causal relationships:

Activity (initiative) → Output (concrete deliverables generated by the initiative) →
Outcome (changes, effects, behavioral shifts) → Impact (overall results of the initiative)

Detailed activity content will be examined in the next chapter, so at this stage, aim for a visualization that can be intuitively understood. After creating the logic model, verify that its content is realistic and feasible.

○ Review Perspectives (Example)

- Validity of Causality: Does the flow from activities to outputs, outcomes, and impact hold logically?
- Feasibility: Even if logically sound, are the necessary resources (e.g., personnel, funding, time) likely to be secured?
- Impact of External Conditions: Does it hold up when considering external factors such as legal systems, local consensus-building, and natural conditions?
- Measurability: Can indicators be established to verify the results and effects?

On the basis of these perspectives, verify whether the logic model accurately reflects the analysis results to date and whether the set objectives are not merely “pie-in-the-sky ideals” but are actually achievable.

Even risks and opportunities deemed important in a previous analysis may prove difficult to target when resource constraints and external conditions are considered. It may also become apparent that the established goals do not address the risks and opportunities previously identified. To establish better goals, use the logic model to repeatedly review and revise them until you can explain in your own words why you are setting that goal.

A logic model is illustrated as follows (Figure 12):

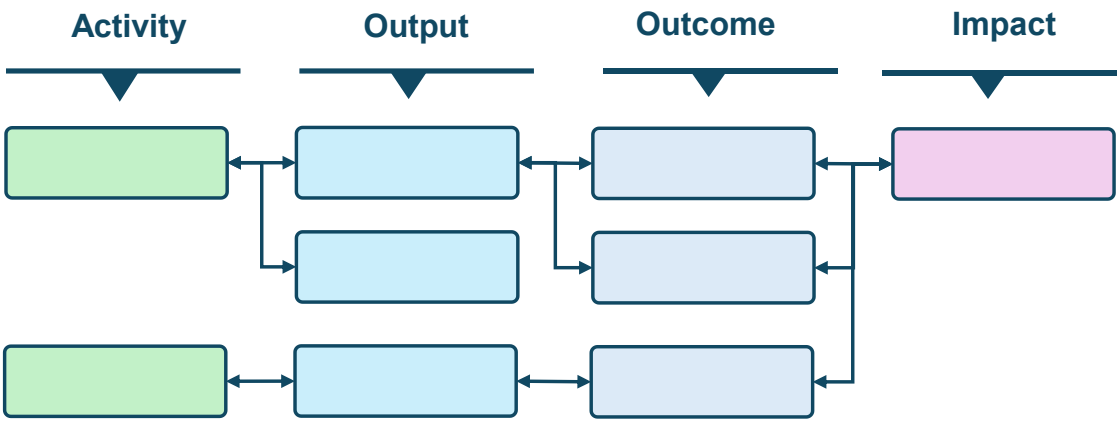


Figure 12: Conceptual diagram of a logic model

Logic models are used not only for nature-positive initiatives but also in various contexts such as the solving of social issues or for urban development. The following examples are not nature-positive cases, but they are provided as concrete reference examples of logic models.

○ Examples of Logic Models

- Ministry of Agriculture, Forestry and Fisheries: Study Group on Social Impact in Rural, Mountainous, and Fishery Villages, 5th Meeting (March 27, 2025) [Document 1-2] “Rural, Mountainous, and Fishery Villages” Logic Model and Case Examples (Draft)
  https://www.maff.go.jp/j/nousin/nousangyosnn_sousei_pj/attach/pdf/impact-124.pdf
- Ministry of Land, Infrastructure, Transport and Tourism: 4th Meeting of the FY2022 Study Group on Promoting ESG Investment Addressing Social Issues in the Real Estate Sector, Document 5-2: Example Logic Model (Draft)
  https://www.mlit.go.jp/tochi_fudousan_kensetsugyo/content/001589250.pdf
- Development Bank of Japan/UR: Visualizing Social Effects in Green-Centered Community Development: Focusing on Grand-Green Osaka in the Umekita Phase 2 Area, August 2024
  https://www.dbj.jp/upload/investigate/docs/0a45821edc78064d45e4d5773109c180.pdf

1.5.2 Formulating the Vision

On the basis of your team's set goals and logic model, express a vision of the future that can be communicated and that resonates with people in the region. When the desired future state is clearly defined and shared with stakeholders, it fosters a sense of participation and conviction in the activities, creating a foundation for collaboration. Vision formulation ideally involves a facilitator carefully eliciting participants' comments, organizing direction through dialogue, and conducting discussions aimed at maximizing outcomes.

A nature-positive vision refers to the future state envisioned through activities and outcomes aimed at achieving nature-positive goals, along with the shared values needed to realize it. Questions to consider when devising your team's vision include "What state do we want the local nature to be in?" and "What kind of relationship do we want to build between nature and society?"

First, on the basis of the dependencies and impacts and risks and opportunities examined in the previous section, sketch a picture of the future that would unfold naturally. From there, begin to envision the future your team aspires to achieve.

As a framework for communication that moves people, Simon Sinek's Golden Circle Theory (2009, Start with Why: How Great Leaders Inspire Everyone to Take Action) serves as a useful reference. This theory, used in corporate branding and marketing, organizes ideas into a three-layer structure of "why," "how," and "what," clarifying the significance for organizations and society. With the addition of the element of "narrative," it is used to evoke support and drive action.

Here, too, rather than merely stating nature-positive goals or visions, you should consciously develop a coherent narrative that articulates "why it is necessary," "how it will be achieved," and "what future it envisions." Proceed with formulation by following the steps outlined below.

○ Steps for Consideration

Step	Question	Example Answer
Why Why do it?	• What would happen to local industries without nature? • What benefits come from protecting nature?	• Semiconductor factories dependent on water might be forced to relocate. • The beautiful nature that remains can become a source of local pride and a tourism resource.
What What are we aiming for?	• What kind of nature do you want to see preserved in 10 or 20 years? • What is the ideal state where local factories and nature coexist?	• We want to become a town where neglected areas are beautifully restored, allowing people to experience the richness of the ecosystem. • As a company coexisting with nature, we aim to become a model factory recognized both internally and externally.
How How will we achieve this?	• What is your approach to engaging with nature? • What principles guide your activities?	• We extend the responsibility of utilizing nature's blessings beyond our own organization to the entire region, ensuring the appropriate use of ecosystem services. • We operate transparently by using a scientific approach under expert guidance.
Say Narrative	• What is one word that would describe the future you envision?	• We determine this through discussions with team members and stakeholders.

Many of the questions in the table above should already be clear from the team's previous consideration. Here, you will connect your answers to the four steps above into a single story and consolidate them into a coherent narrative.

The form of the vision varies by project, but generally it is as follows:

- a concise expression in one or two sentences
- a slogan-like statement.

It is acceptable to develop both, or just one of them.

A vision that sounds good but lacks substance is meaningless. Clearly define your values and vision for the future so that all stakeholders can relate to them and communicate them to others. Use the following as a reference for creation.

○ Components for Formulating a Regional Vision

Item	Description	Example
Time Frame	By 2030, by 2050	"Halt Nature Loss by 2030"
Desired State	Nature recovery, coexistence, and regeneration	"Regional Communities Living in Harmony with Nature"
Region-Specific Values	Forests, water, *satoyama*, seas, culture	"Preserving Rich Forests and Clear Streams for Future Generations"
Direction of Action	Regeneration, collaboration, inclusion	"Regeneration through Collaboration," "Inclusive Initiatives"
Key Stakeholders	Businesses, government, local residents	"Advancing Together with Diverse Local Stakeholders"

○ Examples of Sentences

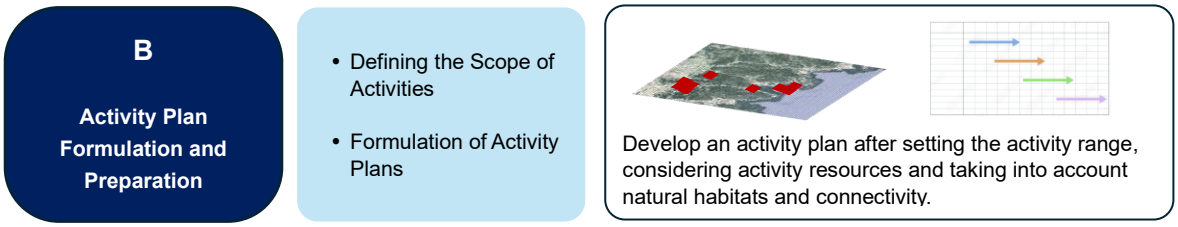
Type	Examples of Vision/Messages
River Basin Collaboration Model	• In the XX Watershed, we will restore the connection between forests, rivers, and the ocean, restore ecosystem health by 2030, and realize a “nature-positive watershed” where people and nature can thrive together.
Municipal Collaboration Model	• We aim to become a “nature-positive city” by halting and reversing nature loss by 2030, passing on to future generations a city that lives with the region’s natural blessings. • We will realize a “nature-positive city” that connects the benefits of biodiversity to the future, aiming for a city that lives alongside the rich nature of [Name]. • We aim for a city where land-use and nature are harmonized and the local ecosystem cycles and is regenerated. • By 2040, we will realize a “nature-positive region” where biodiversity is restored and people and nature coexist in harmony.
Corporate–Community Collaboration Model	• Through collaboration among businesses, local governments, and residents, we will advance initiatives to protect, nurture, and utilize regional natural capital. By 2050, we will realize a “nature-positive region” where nature and the economy thrive together. • We aim to become a ”nature-positive city” that coexists with nature, while achieving both environmental restoration and industrial growth. • We will make “Nature Positive” the principle for all development, agricultural, and industrial activities, aiming for a region where nature and the economy thrive together.

Table 1.5 Establishing the Logic Model and Vision

	What to Do	What to Avoid
1.5.1 Verifying Goals Through Logic Model Development	• Once the logic model is neatly diagrammed, confirm that the goals are achievable and connected to risks and opportunities. • If explaining in your own words feels awkward, go back to the previous section and make the necessary adjustments to your goal setting.	• Reverting to prior analysis or goal setting, even if explanations become strained, as this leads to illogical flowcharts • Overly pursuing precision, which may cause you to spend excessive time creating complex and difficult-to-understand flowcharts
1.5.2 Formulating the Vision	• By following the four consideration steps, concisely articulate a vision that includes values and a future image. • Keep our vision statement from becoming too long.	• Devising a vision statement that sounds good but fails to convey the core values and future vision, which results in the statement lacking consensus or support from participants

2. Activity Plan Formulation and Preparation [B]

Develop an action plan to realize the vision and goals established in the previous chapter.



In this chapter, you will create an activity plan to bring to life the goals, vision, and logic model developed in the previous chapter. Specifically, you'll break down the "activities" in the logic model into actionable units, and you will organize and document the location and scale, the technologies used, the resources and procedures required, and the schedule. This will lead to the manual creation and on-site activity preparation in Chapter 3.

During the planning process, gaps may emerge or adjustments may be needed. Once activities start, new challenges may arise, and coordination with stakeholders may become necessary. Respond flexibly to such changes by revising the logic model, the scope of activities, and the stakeholder composition as needed. Refine the plan to make it realistic and effective.

Note that expert participation remains essential throughout this chapter and beyond. Proceed with the involvement and support of appropriate experts by following the guidelines outlined in section 2.2.1 Selection of Experts.

2.1 Defining the Scope of Activities

In the early stages of activities, not all relevant stakeholders may be involved. Therefore, it is often impractical to develop an activity plan covering every area directly linked to the vision and goals. The first step is to organize a "scope of activities" based on the following perspectives:

- Does the scope of activities directly connect to the vision and goals?
- Is the scope something that can actually be tackled with the current structure, resources, and expertise?

Clarify these two points and recognize the gap (i.e., the difference between ideal and reality) that exists between them. Initial activities will proceed within various constraints. Understanding this gap allows you to set the scope of activities with a long-term perspective.

In defining the scope of activities, consider not only specialized knowledge in fields such as ecology but also local conditions and administrative policies. If possible, seek advice from experts familiar with the local natural environment, and local government officials, to establish an appropriate "level of ambition" for the actual activities.

2.1.1 Geographic Scope

Determine the spatial scale of the geographic area where activities will take place. Consider the geographic scope of activities from two perspectives: a small area such as a specific region or location (insect's-eye view: micro-scale) and a broad area extending beyond cities or prefectures (bird's-eye view: macro-scale).

○ Spatial Scale

Scale	Description
Macro	Global, national, regional, watershed, and other large-scale areas
Micro	Local areas such as forests, wetlands, and farmland

2.1.2 Natural Hierarchy and Habitat

Clearly define the level of nature to be protected—whether it's the ecosystem itself (e.g., forests, wetlands) or specific endangered or native species that require focused conservation. Generally, natural systems are understood as comprising the following three levels:

○ Hierarchy of Nature

Hierarchy	Description
Ecosystem Level	• A cohesive unit comprising multiple biological communities (interacting groups inhabiting the same area) and abiotic environments (non-living elements affecting habitat), such as forests, wetlands, rivers, grasslands, and coral reefs, which provide ecosystem services (e.g., food, water)
Species Level	• The diversity of multiple species within an ecosystem (e.g., endangered species, species richness)
Intraspecific Population (Genetic Diversity)	• A group of organisms within the same species that possess distinct genetic characteristics depending on their geographic location (e.g., Japanese macaque (*Macaca fuscata*) populations on Honshu and Kyushu inhabit different environments and have developed distinct characteristics)

2.1.3 Connections in Nature and Living Things

Determine the scope and size of the natural network (the distribution ranges within which organisms move) targeted by the action plan.

Habitat refers to the environmental conditions within the living space and range necessary for organisms to survive. This includes feeding grounds, hiding places, pathways connecting habitats, and environments essential for reproduction and rearing young (e.g., fish spawning grounds and nursery areas where juveniles grow, or amphibian breeding sites in ponds and wetlands).

Organisms live by moving through natural environments such as forests and rivers. The health of ecosystems is maintained when multiple habitats are connected in a continuous network. This continuity of natural environments is called the "ecological network" (the mechanism connecting habitats). At the same time, restricting the movement of some organisms is also crucial

to maintaining a healthy ecosystem, such as preventing the spread of harmful animals such as wild boars and invasive non-native species.

In developing action plans, it is essential to clearly define the extent to which you will consider the target habitats and natural networks that are based on these relationships.

○ Connections Among Organisms and Examples of Initiatives

	Example
Mechanisms to Aid Movement	• Wildlife passages under or over highways • Fishways enabling fish to migrate upstream → Playing a role in maintaining the health of ecosystems
Mechanisms That Restrict Movement	• Preventing the spread of invasive alien species, such as wild boars or other pests. → Preventing unnecessary spread is also important

2.1.4 Unique Characteristics of Each Location

Determine the content and scope of activities according to the natural characteristics of each region. For example, forests in Hokkaido and forests in Okinawa differ in the plants that grow there and the creatures that inhabit the forests. Even members of the same species may exhibit different habits depending on the region.

Region-specific species and their habitats form valuable natural elements unique to each area. However, distinctive natural features are being lost owing to global warming, changes in land use, urbanization, and farm abandonment.

With a thorough understanding of these regional characteristics, set the content and scope of your activities.

Table 2.1 Defining the Scope of Activities

	What to Do	What to Avoid
2.1.1 Geographic Scope	• Set a geographic scope commensurate with the purpose and the organization's capabilities and resources (e.g., create an activity range map).	• Establishing a geographic scope that exceeds the organization's capabilities and resources
2.1.2 Natural Hierarchy and Habitat	• Clearly define the primary natural targets of activities, such as ecosystems, species, intraspecific lineages (e.g., define native indicator species).	• Targeting a natural hierarchy or habitat environment that is too broad or biased
2.1.3 Connections in Nature and Living Things	• Identify natural networks (including undesirable ones) and target an appropriate scope (e.g., create a network layout diagram).	• Remaining confined to localized activities without considering natural networks (including undesirable ones) • Failing to consider undesirable networks, thus causing worsening damage
2.1.4 Unique Characteristics of Each Location	• Target natural elements that should be protected and restored by thoroughly understanding the region's characteristics (e.g., extract details of regional endemic species).	• Performing activities that are overly general and fail to consider regional characteristics

2.2 Formulating Activity Plans

Once the scope of activities is determined, the next step is to formulate an action plan to achieve the objectives.

2.2.1 Selection of Experts

Select experts or researchers capable of appropriately guiding and supporting the development of the activity plan, and request their cooperation. Developing an activity plan requires design based on specialized knowledge, including consideration of the scientific points and principles discussed later; selection of the necessary recovery and observation technologies and safety measures; and legal compliance. The selection process is not easy, as the required expertise spans multiple fields, so take the time to identify suitable personnel and secure collaboration.

The following are examples of potential experts; it is not necessary to engage all of them. Alternatively, securing individuals or organizations available for consultation at appropriate times is acceptable. (Regarding inviting experts, this should be considered at all times and implemented as needed, regardless of timing.)

○ Potential Experts

Area of Expertise	Examples
Ecosystems and Biodiversity	• Ecologists, conservation biologists, taxonomists
Environmental Science and Resource Management	• Hydrologists, water quality specialists, soil scientists, foresters, agronomists
Data Analysis and Modeling	• Statisticians, data scientists, GIS and remote sensing specialists, mathematical modeling researchers
Social Sciences	• Environmental sociologists/anthropologists, legal system specialists, economists/natural capital accounting specialists
Environmental, Social, and Governance	• Experts and practitioners of international frameworks such as TNFD and SBTN
Safety and Health	• Individuals with corporate experience in occupational health and safety or pollution control, outdoor safety instructors, individuals with NGO experience
Legal Affairs	• Individuals with knowledge of administrative procedures, experts in natural environment laws and regulations, and those with accounting processing experience

2.2.2 Selecting Activity Content

After completing the previous section, " Defining the Scope of Activities," let’s set the specific content of your activities.

The logic model systematically organizes and illustrates how nature-positive initiatives lead to specific outcomes and societal impacts through defined activities. The activity plan is formulated by decomposing the activities component of the logic model into executable units and defining their specific implementation details.

The "action plan" is formulated by breaking down the "activities" in this logic model into executable units (groups) and defining the specific implementation details.
The activities that can be implemented may be limited depending on the results of the "essential scientific points and principles," "technology selection," and "expert selection," which are discussed in the next section. As you consider this chapter as a whole, review and revise the activities as appropriate as you proceed with the formulation, ultimately realizing it in the form of a "Schedule (2.2.9)."

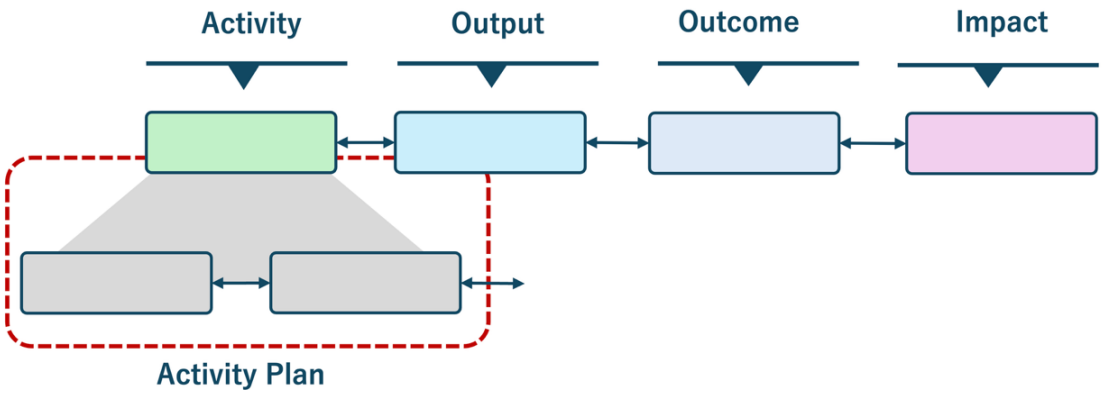


Figure 13: Positioning of the activity plan

Determine the activity content by referring to the following selection procedure.
Consensus building among stakeholders is crucial, even during the selection of activity content. Discuss activity options with various stakeholders, gain a shared understanding, and proceed with the selection.

○ Activity Selection Procedure

1. **Decide What to Do / What Not to Do**
   First, break down the measures (activities) in the logic model into multiple specific activities, and list the candidate activities to undertake in the region. For each, consider factors such as available resources, alignment with objectives, and potential negative impacts on other areas. Then organize them into “do this” and “do not do this for now” (e.g., we will perform lethal control of non-native species along rivers, but we will postpone measures in mountainous areas).
2. **Determine Activity Priorities and Locations**
   Within the scope defined in section 2.1, consider where to start by weighing the priority of issues identified in section 1.4.4 (e.g., start along rivers, then expand to surrounding farmland and *satoyama*).
3. **Decide How to Expand Activities**
   Within the scope defined in section 2.1, choose whether to start small in areas where results are likely to be achieved quickly or to tackle a large area all at once from the beginning (e.g., test in a model area, confirm results, then expand to other regions).
4. **Determine the Activity Period and Pace**
   Refer to the subsequent section 2.2.8 Securing Activity Resources (Budget and Human Resources) and consider how long it will take to achieve results, as well as the pace at

which resources will be allocated (e.g., aim for water quality improvement in the short term [within 3 years] and advancement of forest regeneration in the long term [10 years]).

2.2.3 Scientifically Essential Points and Principles

When you are formulating the activity plan, incorporate scientific perspectives. Consider whether the following particularly important principles can be addressed, while recognizing that it is unrealistic to cover everything. Professional expertise is required to decide on the approach to use.

○ Scientific Principles for Advancing Nature-Positive Activities

Principle	Content
Regional Conservation	Protect the organisms that have long inhabited the land, as well as the unique ecosystems of the region.
Species Diversity Conservation	Maintain a balance of ecosystems where diverse species can coexist.
Intraspecific Variability Conservation	Value differences within the same species (regional characteristics and genetic individuality).
Utilization of Resilience	Utilize nature’s inherent capacity for self-recovery.
Multidisciplinary Collaboration	Collaborate by sharing diverse expertise from agriculture, industry, local communities, academia, and other fields.
Respect for Tradition	Value and utilize traditional techniques, culture, and the wisdom of daily life.
Feasibility	Prioritize achievable goals, rather than merely proclaiming ideals.

2.2.4 Selecting Technologies for Natural Recovery and Observation

Identify technologies essential for nature-positive initiatives—such as those for regenerating and restoring nature or observing natural changes—and incorporate them into activity plans where feasible. Because the subject is nature, however, even technologies that appear logically effective may not deliver sufficient results under actual environmental conditions. Consider implementing pilot programs or small-scale tests to verify the efficacy of your broader plans.

Carefully select applicable technologies while seeking expert advice, considering the following perspectives:

○ Technology Selection Checklist

Item	Description
Latest Technologies and Findings	Identify the latest technologies and knowledge that help to regenerate and restore natural capital.
Traditional Methods	Examine the potential for utilizing existing technologies and locally rooted traditional methods.
Secondary Impacts	Identify secondary impacts (ecosystem disturbance, effects on the local economy) resulting from technology introduction.
Required Resources	Determine the feasibility of practical application of the technology by considering the necessary costs, personnel, and time.
Regional Suitability	Assess the suitability of the technology for the natural and social conditions of the target region.
Track Record and Preliminary Evaluation	Assess the implementation track record, the presence of scientific evidence, and the need for a pilot study.

2.2.5 Monitoring Plan

Plan in advance how to set baselines and conduct monitoring to enable scientific evaluation and ensure that the necessary data is collected. The first step is to establish the state of the natural environment at a specific point in time as a “comparison standard (baseline)” to measure the progress and outcomes of the activity. If data on the “original natural state” are not recorded before you start the activity, or if sufficient historical data do not exist, it may become impossible to determine scientifically whether an increase in ecosystem richness in the activity area is truly due to the activity.

According to the international agreements under the Kunming-Montreal Biodiversity Framework, “2020 is set as the reference year, with the goal of putting nature on a path to recovery by 2030”. However, if data on the state of nature in 2020 are unavailable, or if using an earlier state as the baseline would more clearly demonstrate the effectiveness of the activities, that may be appropriate. When determining which point in time to use as the baseline or how to proceed when data are lacking, consult with experts and use the following points as a reference.

○ Key Points for Setting a Baseline

Item	Description
Selection of Indicators and Monitoring Methods	Are monitorable indicators available, and can data be obtained?
Validity of Target Levels	Are targets set by using scientific target-setting methodologies? If different methodologies are used, can they be scientifically justified?
Implementation and Consensus Building	Can local residents, government, and (if collaborating) businesses realistically respond within a practical implementation framework?

Next, with expert guidance, determine the monitoring items and methods, considering the purpose of monitoring and regional characteristics.

○ Monitoring Items and Methods

Item	Description
Selection of Indicator Species	Select biological species to evaluate the progress and effectiveness of activities. If evaluation by using a single species is difficult, combine multiple indicator species or biotic groups.
Measurement Items	Establish specific measurement items (e.g., population size of indicator species, vegetation cover rate).
Measurement Methods	Select appropriate methods (e.g., transect surveys to record photographic images, GIS analysis, environmental DNA analysis).
Analytical Methods	Select scientific analysis methods, such as statistical, time-series, and spatial analysis techniques.
Measurement Tools and Recording Media	Determine the necessary equipment (measuring instruments, GPS, cameras, drones) and recording media (survey sheets, photographs, GIS databases).
Setting targets for comparison (Control Areas)	Where necessary, establish control stations (areas where activities have not yet been conducted) for comparison with implementation areas (areas where activities were conducted) to clearly evaluate the effectiveness of activities.
Monitoring Timing, Intervals, and Duration	Select the measurement timing, interval, and duration appropriate for the measurement target. Consider factors such as targets that can be measured only at specific times and natural changes that are difficult to observe within short periods.
Monitoring System	If necessary, establish a monitoring system (including responsible personnel and organizational structure) separate from the natural restoration activities.
Public Databases	Utilize existing observation networks and public databases as needed (e.g., meteorological observation data; hydrological and water quality information, including flow patterns, distribution, volume, circulation, contained substances, and properties; publicly available land-use information [e.g., Geospatial Information Authority of Japan]; flora and fauna databases [e.g., NIES: National Institute for Environmental Studies /JBIF: Japan Biodiversity Information Federation, J-BMP: Japan Biodiversity Mapping Project])

2.2.6 Safety Plan

Before you start activities, consider safety measures. Safety should be the absolute top priority during activities. Clearly state that activities should be postponed or canceled if any danger is anticipated, such as the presence of harmful wildlife, natural disasters, or toxic flora/fauna. Have the courage to withdraw during actual activities if necessary. In the next chapter, we discuss having the content reviewed here formalized into a manual and shared or enforced across the organization.

○ Safety Issues

Item	Content
Confirmation of Insurance Coverage	Confirm the selection and contract of volunteer insurance (non-life insurance company) or volunteer activity insurance (Social Welfare Council), notification of participant numbers, and procedures for handling accidents if they occur.
Risk Identification and Mitigation Measures	Identify risks on the basis of the specific tasks and processes at each activity site, and implement physically feasible mitigation measures.
Confirmation of the Presence of Dangerous Animals	Confirm in advance the distribution of plants and insects that may cause toxicity or severe allergic reactions, as well as the activity ranges of animals such as bears and wild boars that pose a risk of harm.
Natural Disasters	Confirm risks from lightning, flooding due to heavy rain, landslides, extreme heat, and cold spells with heavy snow.
Safety Training for Participants and Provision of Equipment	Conduct safety training before and on the day of the event, document it in the plan, and prepare the necessary equipment (e.g., helmets, work gloves, life jackets, protective clothing, medical first aid kits).
Establishment of Emergency Response Systems	Confirm hospital contact networks and emergency response systems (including days and hours of operation) in preparation for accidents. List and clarify emergency contact information.

2.2.7 Legal Procedures and Notifications

Strictly comply to ensure absolute adherence to relevant laws, regulations, and ordinances and ensure compliance with rules established in the activity area. Proactively list and secure all necessary permissions (from landowners/managers) required to operate in the target area.

Be aware that ordinances, region-specific rules, and even unwritten, implicit rules may exist. Involve relevant agencies, local governments, and community residents to organize the necessary confirmations and procedures. Clearly document roles and organizational structures to ensure comprehensive coverage.

To avoid relying on individual judgment, ensure reliable organizational response by conducting discussions, sharing information, and confirming details through meetings. Follow a documented process of application ⇒ approval ⇒ record, based on formal regulations.

○ Key Items to Confirm and Address

Item	Content	Relevant Authorities and Points to Note
Whether the Planned Activity Site Falls Within a Protected Area	Confirm whether the activity site falls within a national park, natural environment conservation area, etc.	Requirement for notification/permit application to Ministry of the Environment, prefectural and municipal governments, etc.
Identification of the Land Owner/Manager	Confirm whether the activity site has a landowner or manager and obtain their permission.	Forest Land Registry (Municipal Office), Legal Affairs Bureau (Land Registry), local residents' association/neighborhood association/agricultural committee/forestry cooperative, municipal office (e.g., Environmental Division, Agricultural Policy Division, Urban Planning Division)
Types of Required Permits and Approvals	Confirm whether permits/licenses are required for development, capture of creature, entry, use of equipment/materials (e.g., drones)	Coordination with the relevant authorities (e.g., Ministry of Agriculture, Forestry and Fisheries; Ministry of the Environment; Ministry of Land, Infrastructure, Transport and Tourism; local governments)
Confirmation of Relevant Laws and Ordinances	Confirm the applicability of laws such as the Nature Conservation Act, Natural Parks Act, and Regional Natural Assets Act	Confirmation of the latest amendments to laws and regulations, including local ordinances
Consultation with, and Notification of, Administrative Bodies	Confirm whether consultation or prior discussion is required and whether there is a notification obligation	Crucial nature of cooperation with local governments and relevant departments
Contracts and Coordination with Landowners	Obtain contracts or usage permits if the activity site is private or on jointly owned land	Reaching agreements with owners and formalizing easements, lease agreements, etc.
Application to Tax Incentive Programs	Confirm the applicability of tax incentives related to environmental conservation activities	Verifying local and national tax systems and understanding application deadlines

2.2.8 Securing Activity Resources (Budget and Human Resources)

Estimate the necessary budget and determine how funding will be secured and allocated. Funding shortages lead directly to activity suspension, so you should categorize budget acquisition methods into "confirmed" and "unconfirmed" sources and formulate realistic plans accordingly. Additionally, your team should establish projections in advance for the human resources expected to participate in actual activities, as well as for any other necessary resources.

○ Resource Confirmation Items

Item	Details
Required Funds	Identify overall activity costs, expenses related to technologies used, licensing fees, personnel costs, equipment and material costs, insurance premiums for on-site activities, etc.
Funding Sources	Organize funding sources such as government subsidies, corporate/organizational sponsorships, and crowdfunding, and classify and track them on the basis of certainty.
Other Resources	Identify the required personnel, meeting and workspace requirements; document storage locations, computer and network environments, etc.

2.2.9 Schedule

Develop an action plan to implement specific activities. Organize the tasks discussed thus far—such as securing human resources, procuring equipment and materials, securing funding, obtaining permits and licenses, and setting up on-site activities—in chronological order. Estimate the number of days required for each task and incorporate them into a schedule. Integrating these elements into a comprehensive schedule enhances the plan's effectiveness and improves the accuracy of progress management.

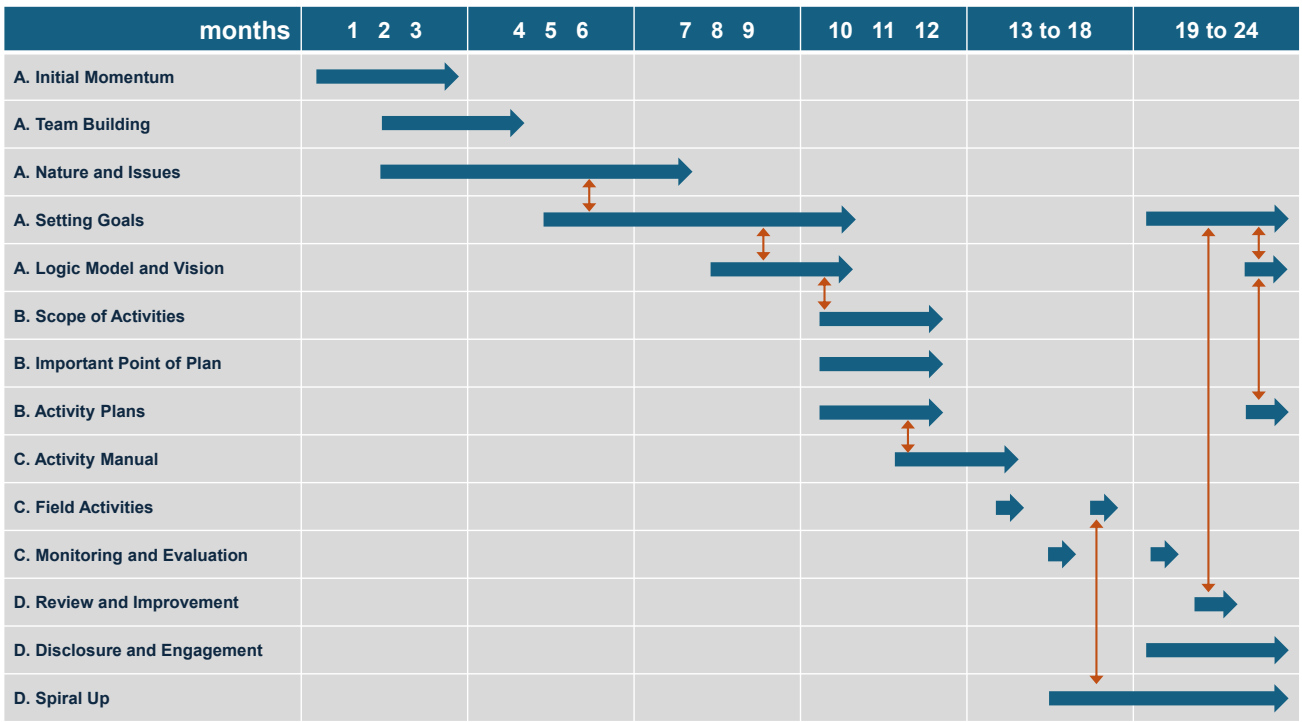


Figure 14: Example of a schedule

Table 2.2 Formulating the Activity Plan

	What to Do	What to Avoid
2.2.1 Selection of Experts	• Recruit experts suited to the activity. • Obtain appropriate expert advice.	• Lacking participation from experts in the appropriate fields • Developing activity plans without the necessary expertise
2.2.2 Selecting Activity Content	• Clearly define the specific activities to be implemented. • Ensure that they are consistent with the logic model.	• Failing to revise the logic model, even though the logic changed as the activities were being decided
2.2.3 Scientifically Essential Points and Principles	• Consider appropriate scientific essentials and principles (e.g., documentation showing what has been confirmed).	• Making decisions arbitrarily or on the basis of fixed ideas, without considering scientifically essential points and principles • Allowing only a select few to make decisions
2.2.4 Selecting Technologies for Nature-Recovery of and Observation	• Select technologies on the basis of expert advice. • Consider the resources, difficulty, and side effects for use of the selected technology.	• Selecting technologies on the basis of the judgment of inexperienced team members • Choosing technologies requiring substantial costs or high difficulty levels
2.2.5 Monitoring Plan	• Understand the baseline data required to achieve the objectives. • Ensure that the monitoring plan aligns with the objectives.	• Being unable to verify improvements because baseline data from before the activity was implemented are unavailable • Failing to clarify the purpose of monitoring
2.2.6 Safety Plan	• Prioritize safety above all else; implement necessary measures; and maintain records of actions taken. • Confirm that the organization has implemented sufficient safety measures.	• Delegating responsibility to a few individuals, such that organizational verification is not performed appropriately • Safety plan is prioritized based on the narrow-sighted opinions of field staff rather than the ideas of the overall manager.
2.2.7 Legal Procedures and Notifications	• List all necessary legal procedures and ensure that they are properly addressed. • Implement legal procedures with appropriate management, obtain approvals, and record them.	• Depending on the responses of specific individuals, such that organizational verification is lacking • Not operating a management system for maintaining procedures appropriately

2.2.8 Securing Activity Resources (Budget and Human Resources)	• Establish a realistic budget and secure an adequate workforce.	• Developing plans on the basis of the assumption of uncertain budget acquisition and workforce allocation
2.2.9 Schedule	• Develop a realistic plan. • Set appropriate checkpoints.	• Failing to detail the activities occurring over the course of the schedule and specifying only the start and end points

3. Activity Execution [C]

After developing an activity manual on the basis of the activity plan formulated in the previous chapter, proceed to the actual field activities (on-site activities) and the implementation of monitoring.

Thus far, your team has completed the setting of goals, the vision, and the logic model (Chapter 1), as well as formulation of the activity plan (Chapter 2). In this chapter, on the basis of the activity plan, you will develop an activity manual for implementation in the field and will then conduct actual field activities with full consideration for safety. Activity improvements will be addressed in Chapter 4.

3.1 Developing the Activity Manual

On the basis of the activity plan, create an activity manual detailing the procedures used to conduct the actual activities. Ensure that all participants and relevant parties are thoroughly informed about the manual's content before field work-activities.

The activity manual should be user friendly, utilizing bullet points and diagrams to ensure that those conducting the activities can follow procedures without confusion and can maintain safety. For technical tasks, such as safety measures and monitoring, create separate manuals as needed.

Figure 15: Manual example (https://www.earthwatch.jp/)

3.1.1 Basic Information

Refer to the basic information established in section 2.2 Formulating Activity Plans and include fundamental details to ensure that everyone shares a common understanding of the activity.

○ Basic Information

Item	Description
Name of Activity	A name that clearly describes the activity content
Purpose of Activity	Nature restoration, ecosystem conservation, environmental education and awareness, etc.
Target Area	Include a map of the area and details of how to access the area
Activity Targets	Forests, rivers, wetlands, coastlines, specific species, etc.

3.1.2 Implementing Organizational and Role Assignments

Clearly state the organizational structure and role allocation during activity implementation. Contact information should be specified in the manual so that participants can reach the organizer.

The team should maintain contact information for participants and the relevant parties to ensure smooth communication, but this personal information should not be included in the manual; it should be maintained only by designated personnel with limited access to the contact list. After the activity concludes, the list should be discarded or maintained under appropriate access restrictions.

○ Structure and Role Assignments

Item	Description
Person in Charge	This leader assumes overall responsibility for the activity, makes decisions in emergencies, and coordinates communication with external parties.
Participant Roles	Responsibilities are shared among those with clearly defined roles, such as leader, execution officer, recorder, safety officer.
External Stakeholders	These entities include local governments, researchers, local residents, cooperating organizations, and they collaborate with the team as necessary.

3.1.3 Activity Content and Procedures

Establish the activity procedures. Clearly describe the procedures for the following items in a way that is easy for participants to understand. If more detailed procedures or precautions are required for safety or technical reasons, create separate procedure manuals and clearly indicate this. Establish withdrawal procedures in advance to ensure smooth and safe withdrawal after the activity concludes.

○ Example Activity Procedure

Item	Description
Activity Type	Specify concrete activity details such as tree planting, habitat creation, non-native-species removal, water quality surveys, etc.
Implementation Period	Schedule implementation on the basis of natural conditions and seasonality, such as flowering periods, breeding seasons, and typhoon-prone periods.
Specific Implementation Procedures	Organize step-by-step procedures (e.g., preparation → transportation → safety check → work → documentation → cleanup → withdrawal).
Tools/Materials and Handling Methods	List all necessary tools and materials, clearly stating safe and appropriate usage methods.
Safety Requirements, Procedures, and Precautions	Clearly state essential rules for hazard avoidance (e.g., wearing protective gear, specified footwear, work gloves, hats, insect repellent/sunscreen, compliance with prohibited actions).
Specialized Technique Precautions	Specify procedures and precautions for tasks requiring specialized skills or qualifications.
Estimated Activity Duration	Establish estimated time requirements for the entire activity and each process (e.g., daily schedule).
Cleanup Procedures	Clean up after the activity ends, collecting materials, inspecting the site, reporting, etc.

3.1.4 Monitoring and Recording

Create procedure manuals for monitoring tasks set in the activity plan to ensure that they are executed safely and correctly. When participants without sufficient specialized knowledge perform these tasks, break down the monitoring methods and survey items set in the activity plan into easily understandable terms for participants and clearly reflect them in the manual. (Portions identical to the preceding section 3.1.3 Activity Content and Procedures are omitted from the following table.)

○ Examples of Monitoring Procedure

Item	Description
Monitoring Task Overview	Basic knowledge for participants to understand and act upon, including the purpose of monitoring, measurement targets (e.g., indicator species, locations), and an overview of measurement and analysis
Measurement Tools and Recording Media	Usage methods and precautions for the necessary equipment (e.g., measuring instruments, GPS, cameras) and recording media (e.g., survey sheets, photographs, GIS databases)
Monitoring Procedures	Procedures for participants to understand and execute accurately, including visual observation, photography, data sheet completion, and app usage (e.g., monitoring locations, measurement quantities, safety precautions)
Other	Safety management and precautions (e.g., disinfecting shoe soles, avoiding damage to measurement areas)

3.1.5 Safety Management

Ensuring safety is essential and must be the top priority above all else. The safety measures established in the activity plan section of the previous chapter must be clearly documented in plain language that everyone can understand; this ensures that they are given the highest priority and are reliably implemented at the activity site.

List all foreseeable risks as comprehensively as possible and specify countermeasures. Additionally, include decision criteria, emergency response measures, and a contact network in preparation for sudden, unforeseeable natural disasters such as torrential rain or earthquakes.

The manual and activity plan must also clearly state that activities will be suspended and safety prioritized whenever any potentially hazardous event occurs, such as sudden weather changes, the appearance of harmful animals, or participants feeling unwell.

○ Examples of Safety Management Items to Include in the Manual

Item	Description
Basic Safety Rules During Activities	Basic requirements such as clothing/equipment standards and thorough weather checks
Precautions for Dangerous Wildlife and Harmful Plants	Methods for dealing with dangerous wildlife (e.g., bears, wild boars, bees) and harmful plants (e.g., poison ivy) specific to the region
Handling of Non-Participants	Prior notification and information sharing with nearby residents and stakeholders, and placement of guides
First Aid and Emergency Response	Methods for first aid, list of nearby hospitals, etc.
Criteria for Activity Suspension and Evacuation	Clear criteria for suspending activities and evacuating safely when danger is detected (either beforehand or during activities), such as information about natural disasters or the appearance of dangerous wildlife (e.g., bears), or actual encounters
Emergency Contact Network and Response System	Local contacts for fire departments, law enforcement, hospitals, insurance companies, etc., and procedures for insurance claims

3.1.6 Environmental Considerations

Clearly state environmental considerations in the manual to ensure that activities aimed at achieving nature positivity do not inadvertently damage the activity site or its surrounding environment.

○ Examples of Environmental Considerations

Item	Description
Endangered Species and Habitats in the Activity Area	Information regarding rare species and important habitats should be kept confidential outside the relevant parties to prevent poaching and overharvesting.
Sampling and Monitoring	Confirm the potential for secondary environmental damage caused by surveys and monitoring, and establish measures to minimize these impacts.
Waste and Material Disposal Methods	Properly dispose of waste and used materials generated during activities; do not leave them at the site. Also consider possibilities for reuse and recycling.

Interaction with Wildlife	Strictly adhere to actions that minimize impacts on nature, such as not feeding, touching, or taking wildlife, and complying with photography rules.

3.1.7 Guidance for Activity Participants

In addition to the above, clearly outline necessary information in a manual format to ensure that participants can engage in activities with peace of mind.

○ Examples of Guidance Items

Item	Description
Logistics	Meeting time, meeting location details (map, access method), and the day’s timetable
Clothing and Equipment	Essential clothing and equipment participants should prepare in advance (e.g., work gloves, boots, hat, drinking water)
Information to Know in Advance	Local conditions (terrain, weather, footing), availability and location of restrooms, rest areas, and places to obtain food and drinks (e.g., vending machines)

Table 3.1 Developing the Activity Manual

	What to Do	What to Avoid
3.1.1 Basic Information	• Ensure the purpose and target audience are communicated and understood by all participants.	• Conducting activities without participants understanding the purpose, resulting in failure to achieve the desired effect
3.1.2 Implementing Organization and Role Assignments	• Clearly define responsible parties and field activity leaders to design safe and effective activities through appropriate command and management.	• Failing to clarify responsibilities and leadership roles, such that inappropriate on-site decisions and their negative consequences may occur
3.1.3 Activity Content and Procedures	• Establish procedures that enable activities to proceed appropriately as planned by following the manual.	• Providing unclear descriptions of procedures, causing activities to halt midway • Not considering the appropriate timing for data collection (timing discrepancy)
3.1.4 Monitoring and Recording	• Establish a baseline before the activity and, if necessary, gather detailed data on the “original state.” • Establish procedures to ensure required measurements are performed appropriately and according to plan. • Establish procedures to ensure monitoring data are properly recorded and stored.	• Starting the activity without first understanding the “original state” • Insufficiently preparing for monitoring, resulting in failure to collect the appropriate data originally intended • Lacking some monitoring information, preventing proper analysis later
3.1.5 Safety Management	• Prioritize participants’ safety and health in all activities. • In the event of an injury, provide prompt and appropriate first aid and apply insurance coverage correctly.	• Lacking sufficient awareness and participant understanding, thus potentially leading to lax safety management • Being unable to provide appropriate treatment and initial response on site in the event of an accident or injury
3.1.6 Environmental Considerations	• Establish procedures to conduct and conclude activities without negatively impacting the activity site.	• Mistakenly damaging or looting valuable natural resources, despite the activities being intended for nature positivity
3.1.7 Guidance for Information for Activity Participants	• Ensure conditions that allow participants to engage in activities with peace of mind.	• Failing to complete necessary preparations beforehand, such that participants are unable to join in with field activities

3.2 Field Activities

Follow the activity manual to conduct activities safely and efficiently. Participants are requested to review the manual created in the previous section and to perform tasks according to the procedures. The secretariat should lead activities while ensuring safety and avoiding damage to the surrounding environment, while understanding that natural disasters or unexpected accidents may occur.

3.2.1 Preparations for Activities

Reconfirm that preparations are complete before conducting the activity.

○ Confirmation Items

Item	Description
Activity Period	Determine whether the activity aligns with the “seasonal feel” outlined in the activity manual. Be mindful that climate change may cause weather patterns to differ from traditional seasonal norms (e.g., prolonged heat waves).
Procedures	Confirm that all preparatory steps are complete, including legal procedures, safety management, and communication or information sharing with neighbors.
Equipment	Confirm that all necessary equipment is available and operates normally. Ensure calibration of measuring instruments has been performed, including checking charging status and batteries.
Personnel Deployment and Training	Confirm that experienced personnel are assigned, that participants’ technical skills and awareness levels are appropriate, and that a sufficient workforce is available. Verify that adequate prior education and training have been provided where necessary.
Decision on Feasibility	Confirm weather forecasts affecting the activity site (typhoons, torrential rain), sightings of venomous creatures (e.g., Japanese pit vipers, hornets, centipedes) or harmful wildlife (e.g., bears, wild boars), and dangerous plants such as poison ivy (risk of severe dermatitis or critical illness even from minimal contact). Expert knowledge may be required for risk assessment; request support as needed. If danger is perceived, have the courage to postpone the activity.

3.2.2 Preparations Immediately Before Activity

To ensure safety and execute activities as planned, reconfirm the activity location before starting, and share the necessary details with all participants.

○ Activity Details

Item	Description
Pre-activity Confirmation	Share and reconfirm the day’s activity details, considerations for local residents, and safety precautions with all participants. Reconfirm permission for the activity with the owner or person in charge of maintaining the target land.
On-site Checks	Visually inspect the site to ensure that there are no hazardous areas, and take the necessary measures as required.
Consideration for Neighbors	Reconfirm communication with nearby residents, landowners, and stakeholders around the activity site. Maintain good relations through greetings and interactions.

Materials and Equipment Verification	Prepare and verify the operation (functionality, charging status) of equipment required for nature-positive activities (tree planting, grass cutting, river/beach cleanups) and monitoring devices/data recording methods.

3.2.3 Activity on the Day

Conduct activities safely according to the activity manual.

○ Implementation Details

Item	Description
Appropriate Command Structure	Clearly designate who the leader is, and conduct activities following his or her commands.
Accurate Activities	Execute activities accurately according to the activity manual and commands, following the plan.
Activity Documentation	Conduct monitoring and record-keeping by using appropriate methods based on the activity manual.
Ensuring Safety	Constantly monitor sudden weather changes and unexpected local conditions (e.g., wildlife damage or complaints from neighbors), and take the necessary actions, such as issuing warnings or suspending or canceling activities as required.
Accident Response	In the event of an accident or incident, respond promptly and appropriately according to the safety manual.

3.2.4 Upon Activity Completion

Follow the activity manual and perform proper cleanup to avoid causing any damage to the activity location or inconvenience to the landowner and neighbors.

○ Implementation Details

Item	Description
Safety Confirmation	Confirm the safe return of all participants.
Equipment Removal	Confirm that all equipment brought to the site has been packed up and removed.
Cleaning	Thoroughly clean and tidy the activity site; all trash must be taken home.
Notification of Neighbors	As necessary, inform nearby residents and relevant parties that the activity has ended.
Debriefing	Hold a short debriefing session with all participants to share issues and improvement points while memories are fresh.

Table 3.2 Field Activities

	What to Do	What to Avoid
3.2.1 Preparations for Activities	• Gather all information that affects safety at the activity site. • Postpone activities if risks are high. • Personnel responsible for activities or measurements must conduct the necessary activities only after adequate education and training.	• Being aware of sudden weather changes but unable to make a decision, such that the team assembles on-site but cannot proceed with the activity • Failing to sufficiently educate and train participants, thus potentially leading to injuries, damage to nature during measurements, or incorrect measurements
3.2.2 Preparations Immediately Before Activity	• Before the activity, survey the site where the activity will take place and share any hazardous areas with participants.	• Discovering hazardous areas only after starting the activity, thus increasing the risk • Failing to greet neighbors on the day, potentially leading to a deterioration in subsequent relations
3.2.3 Activity on the Day	• Implement activities while precisely following the manual through an appropriate chain of command.	• Not clarifying who the on-site leader is, thus hindering swift on-site responses when problems arise and resulting in inadequate activities
3.2.4 Upon Activity Completion	• After the activity, strive to restore the site to a suitable condition through equipment removal and cleanup (Avoid leaving trash or vandalizing). • Report the completion of activities to the necessary parties.	• Leaving litter scattered around and offending local residents • Removing rare species from the site

3.3 Analysis of Monitoring Results and Activity Evaluation

It's vital to properly analyze and evaluate the monitoring results obtained from nature-positive activities. While analysis is typically conducted by experts, to reflect the vision of the core team that launched the nature-positive activity members of the team should actively communicate and strive to understand during data analysis and interpretation. Prepare concise, visual reports to facilitate discussions among all stakeholders for future planning.

3.3.1 Data Analysis

Conduct analysis based on a scientific approach, using the following as a reference.

○ Data Analysis Procedure

Item	Description
Initial Summary (Objectively Organized)	• Quantitative Trends: Changes in the cover of specific plant species, shifts in biodiversity indices, etc. • Qualitative Findings: Resident satisfaction, motivations for activity participation, etc.
Secondary Summary (Visual Representation)	• Visualization of spatial distribution by using GIS • Multi-year trend graphs and maps • Comparison of graphs between experimental and control areas
Understanding and Visualization	• Comparison of before and after activities and between implementation and control areas • Understanding temporal changes (e.g., vegetation recovery rate, water quality indicators, biodiversity indices) • Spatial and quantitative changes using GIS and statistical analysis
Discussion	• Understanding how natural conditions have changed on the basis of analytical results • Assessing the relationship between activities conducted on site and changes in the natural environment
Report	• Create a concise and visually well-organized report that is understandable by non-specialists

3.3.2 Effect Measurement

Compare the initial goals with the actual results, carefully organizing which factors contributed to the outcomes and where challenges remain.

Your team should carefully examine the monitoring results and analysis findings to conduct logical impact measurement and activity evaluation. After determining the degree to which activity goals were achieved, you will derive subsequent improvement measures. Leverage the insights gained from impact measurement to inform the development of future activities.

○ Effect Measurement Items

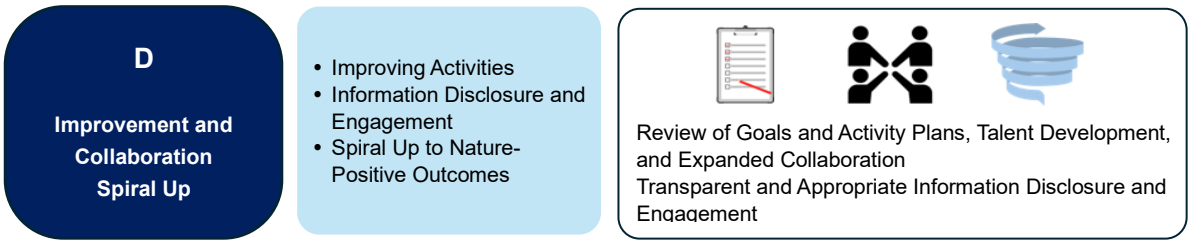
Item	Description
Analysis of Factors	• Impact of activities such as planting and non-native species removal • Typhoons/heavy rains, surrounding land-use changes, invasion by non-native species, etc.
Effect Measurement	• Ecosystem Improvement: Species increase rate, number of rare species appearing, canopy cover rate • Ecosystem Services: Water retention capacity, flood risk reduction effects • Social Effects: Number of participants, level of interest among local residents
Comparison of Goals and Results	• Habitat restoration, establishment of rare species, expansion of community participation, etc.

Table 3.3 Analysis of Monitoring Results and Activity Evaluation

	What to Do	What to Avoid
3.3.1 Data Analysis	• Scientifically analyze changes and trends in monitoring survey data by using graphs and tables. • Visualize monitoring results.	• Not organizing data objectively, making it incomprehensible to stakeholders other than experts • Having analytical results that are not scientifically sound, thus preventing appropriate scientific judgment
3.3.2 Effect Measurement	• Properly analyze factors and implement logical measures of effectiveness. • Demonstrate the achievement status of objectives in a convincing manner.	• Failing to clarify what has been achieved and to what extent • Having evaluation results that are difficult for non-experts to understand and are not shared, thus preventing the use of the results in subsequent activities

4. Improvement, Collaboration, and Spiral Up [D]

Review the activities conducted in previous chapters. As needed, in this chapter you will refine goals and plans and implement appropriate information disclosure and engagement (collaborative involvement). Furthermore, by using a landscape approach, you'll spiral up activities through sustained deepening and expansion to progressively develop and enhance activities that contribute to nature-positive outcomes and regional value creation.



Nature-positive initiatives are not merely "nature conservation activities"; nature positivity means "halting nature loss and putting it on a path to recovery," requiring an economic perspective that is connected to regional value creation. To achieve this, just as with environmental management systems and quality management systems, your team must implement and execute dynamic (fundamental and bold) changes to activities while continuously reviewing and improving activities through the PDCA cycle (Plan-Do-Check-Act).

4.1 Activity Improvement

In this section you will visualize the progress, outcomes, and challenges of nature-positive activities and you will implement appropriate improvements.

4.1.1 Reviewing Goals

On the basis of the monitoring results and new insights gained through activities, reevaluate the appropriateness of your goals and revise them as necessary.

Interest in nature-positive initiatives has surged rapidly in recent years, with research and societal demands evolving daily. By recognizing the high likelihood of discrepancies between initial assumptions and these developments, you should consider flexible goal adjustments when deemed necessary, avoiding rigid adherence to original plans.

Use the table below as a reference for the evaluation of inputs, and make appropriate adjustments where necessary.

○ Review Inputs

Item	Description
Social Conditions	• Changes in the regional environment (e.g., level of activity in agriculture/industry, shifts in the working-age population, establishment or closure of factories and shopping centers, school consolidation or closure) • Revisions to national and local government regulations, establishment or discontinuation of subsidies • Changes in circumstances surrounding natural capital (e.g., ESG [Environmental, Social, and Governance] or sustainability trends, latest research findings, social and policy trends)
Comparison with Goals	• Degree of alignment or divergence between your current nature-positive goals and the level and direction demanded by society • Degree of divergence from changes in local corporate management policies and municipal government policies
Differences from Initial Assumptions	• Differences (positive or negative) between the understanding and values of local residents regarding nature, as revealed during activities, and assumptions made during planning • Discoveries of ecosystem conditions or changes not anticipated initially
New Insights	• Insights regarding more appropriate ecosystem conservation targets and indicators • Insights into new possibilities for natural recovery
Activity Evaluation	• Progress status of activities (e.g., ahead of schedule or behind schedule) • Side effects of activities (unexpected negative or positive impacts on the environment or the local community) • Evaluation and reactions from the community and participants (negative or positive aspects)
Feasibility of Goals	• Reassessment of the feasibility of set goals (based on the degree of goal achievement and activity evaluation, judged by difficulty, required funding, etc.)

○ Review Output

Item	Description
Vision	If goals undergo substantial revision, altering their nature or outputs/outcomes, review the vision as necessary.
Logic Model	Review the logic model when objectives are revised and the pathways to achieve them are expected to change.
Activity Plan, Structure, and Manual	If the logic model is revised, amend the related activity plans and manuals, and review the implementation structure (revised according to section 4.1.2 Reviewing Activity Plans, Manuals, and Systems).

4.1.2 Reviewing Activity Plans, Manuals, and Systems

Review activity plans, systems, and manuals by considering the following points.

○ Review Points

Item	Review Points	Revision Areas
Activity Plan	• Do stakeholders and the community fully understand the purpose and content of the activities? • Were there any omissions regarding outcomes or safety management?	Scope of activities, activity content, technology, legal procedures/notifications, activity resources, monitoring plan, schedule, safety plan
Budget	• Is sufficient budget secured for future activities?	Securing new funding sources such as grants or donations, reviewing expenditures, budget reduction
Manual	• Were activities, safety management, and monitoring performed as planned? • Were emergency response measures implemented?	Implementing organization/role allocation, activity content and procedures, safety management, environmental considerations, monitoring/recording
Organization	• Were activities effective? • Were roles and responsibilities (appropriate governance) clearly defined? • Were third-party comments sought?	Clarification of roles and responsibilities, identification and enhancement of necessary competencies for each responsible party, appropriate education and training, strengthening mechanisms to hear comments from the community and external parties
Technical Expert	• Was there participation and support from appropriate experts? • Was the necessary technology available?	Approaching necessary experts, reviewing methods for acquiring and accessing technology
External Collaboration	• Was there sufficient communication with the community? • Was there adequate administrative support? • Was the environment conducive to new participants joining?	Collaboration with the community and government (briefings/study sessions), information dissemination methods, consultation reception counters

4.1.3 Strengthening Collaboration

Consider collaboration across different organizations and locations. If deemed effective, expand activities accordingly.

Expanding the scope of activities may enable the implementation of nature-positive initiatives that were previously difficult to execute. Even for activities focused on a specific region, collaborating with various organizations and groups can foster the evolution of activities through learning, promote understanding among government and businesses through joint events, and lead to expanded support.

Consider whether collaboration with diverse entities—such as local governments, corporations, non-profit organizations, universities/research institutions, and regional businesses—

can enhance the quality and efficiency of activities by pooling each other's expertise and resources.

○ Examples of Expanded Collaboration

Item	Description
Expanding Activities	Exchange information with other organizations active in the same region or neighboring regions. If deemed effective, consider joint activities or partial collaboration.
Expanding Collaboration	Evolve activities not only through on-site collaboration but also by broadly partnering with organizations engaged in nature-positive initiatives to learn from each other.
Expanding Events and Study Sessions	Beyond direct environmental activities, participate in, or organize, events and study sessions to promote mutual learning and raise awareness of your activities.
Expanding Partnerships	Approach new municipalities, companies, nonprofit organizations, universities/research institutions, and local businesses to participate in activities or request support, and explore collaboration opportunities.

4.1.4 Human Resource Development

It's often necessary to develop the human resources to drive forward the evolution from traditional nature conservation activities to nature-positive activities. This effort includes developing leaders, as well as enhancing the capabilities of all participants.

Consider developing personnel in the following areas:

○ Skills Needed by Personnel Working on Nature-Positive Activities

Item	Description
Practical Skills	Possession of knowledge coupled with an ability to "actually mobilize diverse individuals and organizations and translate that into action" (includes coordination and facilitation skills)
Cross-Sectoral Competence	The ability to grasp a broad range of knowledge in real time—including government, corporate, financial, and social trends—in addition to specialized knowledge in areas such as ecosystems, environmental regulations, and ESG, and to make judgments covering with cross-sectors.
Co-creation Skills	The ability to bridge gaps by connecting the challenges, capabilities, and resources of diverse individuals and organizations—such as government, businesses, citizens, and researchers—to foster collaboration.

These capabilities cannot be developed in individuals overnight. If there are individuals within the current organization who can serve as role models, you should focus on developing them through on-the-job training centered around those individuals.

Additionally, consider utilizing external programs such as the Nature-Positive Academy (hosted by the Sustainability Center and Fisherman-Japan Group, with cooperation from Tohoku University, among others) and the Nature-Positive Management Promotion Platform "Useful Links Collection" (on the Ministry of the Environment website), as well as various programs offered by government agencies and NGOs.

4.1.5 Expanding Awareness

To broaden understanding and interest in nature-positive activities, implement initiatives to expand awareness among local stakeholders and individuals or organizations expected to collaborate in the future. When nature-positive activities become a source of pride for the community and garner widespread support, this contributes to the expansion and continuity of the activities and enhances the enjoyment of those involved in the work.

○ Examples of Initiatives

Item	Description
General Public	Raising awareness through nature observation meetings, volunteer experiences, planning of various environmental events, and encouraging citizen participation in citizen science programs (such as those conducted by Earth-watch Japan)
Young People	In addition to the above, conducting environmental education in schools and various workshops. Including junior high and high school students, who can be expected to make tangible behavioral changes within a few years, provides a valuable opportunity to hear candid comments from young people.
Agricultural, Forestry, and Fisheries Workers	Jointly implementing programs that address the challenges and importance of primary industries and contribute to the inheritance and utilization of traditional knowledge.
Companies and Local Governments	Collaborate on activities aligned with corporate and local government needs to promote understanding of the importance of implementing nature-positive initiatives locally.
Media	Enhancement of regional and societal recognition and communication capabilities through media coverage requests and appropriate lectures.

Table 4.1 Activity Improvements

	What to Do	What to Avoid
4.1.1 Reviewing Goals	• Adjust goals in response to changes in external information. • If goals remain unchanged, clearly explain why. • Revise the vision and logic model in line with goal changes.	• Changing goals every year, so that they lose their significance • Changing goals so that they no longer align with the activities originally intended • Not appropriately revising the logic model
4.1.2 Reviewing Activity Plans, Manuals, and Systems	• Revise plans through thorough discussion with stakeholders. • Adapt the plan to the situation. • Involve necessary experts and take a scientific approach.	• Changing plans without stakeholders' knowledge • Failing to review the plan • Lacking participation from researchers and experts suited to the plan
4.1.3 Strengthening Collaboration	• Collaborate with other organizations active in the same or adjacent areas to achieve larger and more effective activities.	• Failing to build good relationships with neighboring organizations, thus potentially leading to smaller-scale activities and decreasing recognition and support
4.1.4 Human Resource Development	• Develop personnel who can connect various departments to expand activities.	• Failing to develop leadership personnel, thus potentially gradually leading to a divergence in the awareness of those involved in the activities and resulting in an increasingly ambiguous direction for the activities
4.1.5 Expanding Awareness	• Foster a situation where local residents take pride in the natural recovery achieved through the activities and independently expand them. • Encourage children and young people who empathize with the cause to begin supporting it by using knowledge gained through the internet, thus enabling them to become an important force in the community.	• Failing to secure sufficient public understanding and adequate administrative support • Lacking media attention and interviews

4.2 Information Disclosure and Engagement

Communicate information related to nature-positive activities to the community appropriately and transparently. Access to transparent information helps to bridge understanding gaps among local residents, businesses, organizations, and government agencies, thus fostering reassurance, support, and co-creation. Furthermore, gaining broad recognition from experts in natural capital and regional revitalization (e.g., academics, corporate ESG [Environmental, Social, and Governance] officers, specialists, government ministries) can substantially propel the initiative forward.

Appropriate feedback gained through engagement reveals challenges and improvement measures that activity members themselves may not readily notice, thus contributing to the sustainable and sound development of the activities.

4.2.1 Disclosure Content

The following items should be considered for disclosure to local communities and the general public.

○ General Disclosure Content

Item	Description
Basic Information	Activity name, implementing body, participating organizations (citizen groups, academic organizations, NGOs, companies), activity location, activity period, etc.
Purpose/Background	Background for initiating the activity, its purpose, and the challenges or local needs it aims to address
Activity Details	Specific implementation details (e.g., vegetation restoration, surveys), target ecosystems (specific species of plants, birds, insects, etc. or ecosystems such as wetlands, forests, grasslands), and methodologies (e.g., scientific approaches, citizen science activities, application of traditional knowledge)
Indicators and Goals	Performance indicators and progress metrics (e.g., increase in species, habitat expansion, flood prevention effectiveness), scientific data (e.g., observations, environmental DNA, satellite imagery), external evaluation/audits (review by external experts, publication in academic journals)
Future Projections	Current challenges, funding plans, integration into administrative policies, achievement of ESG-related metrics, etc.

Nature-positive activities conducted locally are not undertaken solely for investors. However, disclosure items required under ESG frameworks can sometimes serve as a reference for transparent information sharing. Complying with these disclosure standards not only earns recognition from experts but also has the potential to increase awareness of the activities and attract new support.

For example, in the case of the FSC® (Forest Stewardship Council) certification forests in Minamisanriku, a report based on the TNFD LEAP approach was published with the cooperation of WWF Japan. This resulted in strong recognition from experts and has become an opportunity for the initiative to be widely recognized as a model case of sustainable forestry activities in Japan. (Reference: “Corporate Dependencies and Impacts on Nature,” Case Study: LEAP Verification in Minamisanriku Forest Management Council’s FSC® Certification Forests.)

Although advanced disclosures aligned with ESG standards aren't always required, let's explore disclosure options as an example of transparent disclosure metrics.

○ Disclosure Content Required by ESG

Item	Description
Governance Structure	Organizations undertaking nature-positive activities must have a system in place whereby important decisions are made through appropriate meetings and established rules. Mechanisms must be in place to incorporate the comments of people and organizations likely to be affected by the activities.
Strategy	When you are determining activity content, appropriately assess the dependencies and impacts and risks and opportunities, considering potential long-term scenarios. Clearly identify affected regions and relevant organizations.
Risks and Opportunities	Risks and opportunities are considered not only for the people and organizations directly involved in the activities, but also for broader areas such as regions and watersheds. The content of this assessment is clearly stated, along with when it was conducted and whether it will be reviewed regularly going forward.
Indicators and Targets	Goals are set on the basis of the above assessment results. Indicators to measure progress toward achieving these goals, along with actual results and progress status, are clearly stated.

4.2.2 Disclosure Methods and Management

Determine disclosure methods while considering the target audience, and ensure the accuracy and timely disclosure of information. To prevent outdated information from undermining trust in your team's activities, establish a system in advance for confirming and updating the content of disclosures, including an information disclosure policy.

○ Examples of Disclosure Methods

Item	Notes
Paper-Based Reports, Pamphlets	While paper-based disclosure is becoming less common owing to environmental considerations, it remains an effective method for distribution at lectures or site tours.
Website	Ease of access and the potential for link-based dissemination make this an effective general disclosure method. Regular updates of relevant information are essential.
Social Media	Posts enable real-time information dissemination, but using inappropriate expressions carries a high risk of backlash.
Academic Presentations	Presentations at academic conferences and in academic papers can lead to scientific backing and are expected to increase trust within the community.

Consideration must also be given to portrait rights, copyrights, and greenwash (the act of making false or misleading claims about the environmental benefits of a product, service, or company strategy), so consider introducing some form of compliance check and ethical audit system. If your team does not have sufficient knowledge, consult with legal experts in advance.

○ Examples of Compliance Checks and Ethical Audits

Item	Notes
Portrait Rights	When posting photos or videos, obtain consent from the persons appearing in them in advance, or obtain their consent before disclosure.
Copyright	Do not use content created or owned by other companies (e.g., company or organization logos, certification marks, artist works, anime) without permission. Each has its own rules, so be sure to check them and obtain permission if necessary.
Greenwashing	Avoid expressions that are far from reality and descriptions that lack scientific basis and are aimed at making your activities seem more environmentally friendly and sustainable than they are.

4.2.3 Engagement

Go beyond mere disclosure and deepen dialogue with stakeholders to enhance the quality and credibility of your activities by using a landscape approach that integrates natural restoration with industry and daily life.

Dialogue for mutual understanding promotes a renewed awareness of the connection with nature among local residents and other stakeholders; this can lead to the active participation of a diverse range of participants, including government, businesses, citizens, and researchers. By actively listening to the comments of external stakeholders, you can accurately identify issues in your activities and improve their quality. Consider conducting discussions face-to-face (in person) whenever possible.

○ Examples of Disclosure Methods

Item	Notes
Reporting Sessions/Study Sessions	Sharing activities and exchanging comments directly contributes to trust building, thus increasing participant interest and fostering consensus.
Site Visits and Briefings	Providing stakeholders with opportunities to observe activity locations and content promotes tangible understanding, ensures transparency, and increases motivation to participate.
Briefings and Comment Exchange with Stakeholders	Providing explanations or exchanging comments with stakeholders enhances understanding by those who are affected by the activities or who own/manage the activity sites.
Reporting to Government Authorities	Providing explanations or exchanging comments with government authorities may lead to administrative policies that enhance your activities.
Citizen Science	Encouraging participation in biological surveys and similar activities deepens citizens' scientific understanding and fosters their support for conservation efforts.

Table 4.2 Information Disclosure and Engagement

	What to Do	What to Avoid
4.2.1 Disclosure Content	• Disclose necessary and sufficient information about activities. • Disclose information by considering external evaluations.	• Lacking disclosure or using disclosed content that is not up to date • Causing suspicion among local stakeholders owing to a lack of disclosure
4.2.2 Disclosure Methods and Management	• Publish activity details on the web at appropriate times to gain stakeholder understanding.	• Entrusting social media posts to inexperienced individuals, thus leading to problematic expressions and causing a backlash • Failing to obtain permission from people appearing in photos before posting them to social media
4.2.3 Engagement	• Increase stakeholder interest and gain support by having stakeholders attend on-site briefings.	• Not providing a forum for stakeholders to voice comments, thus potentially leading to demands for improvements after activities have significantly progressed and consequently halting operations

4.3 Spiral Up to Nature-Positive Activities

To move beyond mere nature conservation activities, your team should strive for a step-by-step spiral-up-making progress toward higher-level collaboration and activities, to simultaneously achieve activities that “halt the loss of natural capital and put it on a path to recovery” and create regional value.

The Nature-Positive Economic Transition Strategy formulated by Japan’s Ministry of the Environment and other relevant ministries outlines ways to strengthen efforts toward the regeneration and recovery of natural capital as the next stage beyond nature conservation. Ultimately, it aims to reverse biodiversity loss and transition to a society coexisting with nature.

Below are some ways to build upon these phased efforts and connect them to regional value creation.

4.3.1 Initiatives Referencing Regional Examples

Nature-positive activities are being implemented in regions across Japan. Many regional examples demonstrate how natural regeneration and economic value can be achieved simultaneously, primarily through sustainable international certifications, Globally Important Agricultural Heritage Systems (GIAHS), Japanese Agricultural Heritage Systems (JAHS), and carbon credits. Let’s examine these examples and consider how they might be applied to our own activities.

○ Regional Nature-Positive Examples

Item	Description
Karatsu City, Saga Prefecture: Seagrass Bed Restoration Project	Local communities, fisheries, and research institutions collaborated to restore seagrass beds (including eelgrass meadows) that had declined owing to coastal erosion. Seagrass beds serve as spawning and nursery grounds for fish and shellfish, purify water, and act as greenhouse gas sinks. The project has already obtained J-Blue Credit® certification (The certification of verifying and approving the amount of carbon dioxide removed or sequestered by marine and coastal ecosystem project).
Minamisanriku Town, Miyagi Prefecture: Forest Certification, Aquaculture Certification, and Nature Coexistence Site Certification	Simultaneous acquisition of forest certification and aquaculture certification within the same watershed (municipality). FSC®-certified Minamisanriku Cedar and ASC-certified oysters are increasingly adopted in ethical consumption markets. Minamisanriku FSC®-certified forests are recognized as “Nature Coexistence Sites” by the Ministry of the Environment.
Owase City, Mie Prefecture: Nature-Positive Consortium	Promoting both biodiversity conservation and CO_2 reduction by combining green carbon from forest management with blue carbon from seagrass bed restoration. A consortium has also been launched to promote forest assessment, biodiversity index creation, seagrass bed restoration, and renewable energy.
Kakegawa City, Shizuoka Prefecture: Shizuoka Tea Farming Method	A traditional farming method where pampas grass and bamboo grass around tea fields are cut, dried, and spread over the tea plots. This practice conserves soil, suppresses weeds, and supplies organic matter, while also maintaining habitats for diverse native and rare species. It achieves both high-quality tea production and biodiversity conservation.

Sado City, Niigata Prefecture: Sado's *Satoyama*: Coexisting with the Toki	A traditional integrated agriculture, forestry, and fisheries system combining *satoyama* and *satoumi* (A coastal area where high biological productivity and biodiversity are maintained through sustainable human interaction and management). The Tokimeguri *Satoyama* Certification System began in 2008, branding rice grown through environmentally friendly farming as Tokimeguri Rice, while also increasing tourism revenue.
Kumamoto Prefecture, Aso Region: Aso's Grasslands and Sustainable Agriculture	Vast grassland landscapes are maintained through grazing and controlled burning. These grasslands serve as habitats for diverse wildlife and are linked to livestock farming and tourism. This has led to the branding of Aso Akaushi cattle and increased tourism revenue.

4.3.2 Initiatives Inspired by Corporate Examples

Inspiration can also be drawn from corporate initiatives practicing nature-positive approaches. In recent years, driven by ESG considerations, companies have actively pursued nature-positive activities to reduce business risks and enhance external evaluations.

The positioning of environmental activities in local communities is also shifting from traditional corporate social responsibility toward the creation of shared value. Consequently, nature-positive initiatives are increasing.

For companies, activities are often based on business necessity, resulting in clear visions and logic models. This makes them excellent reference cases for developing local activities into higher-level collaboration and initiatives aligned with nature-positive principles. Below are several examples.

○ Corporate Nature-Positive Examples

Item	Description
SUNTORY: Water Source Forest (Natural Water Forest) Activity	Long-term conservation and cultivation of water source forests, implementing forest management and biodiversity conservation. This initiative has now been elevated to the corporate vision and is featured in commercials.
SEKISUI House: Five Trees Project	Limitation of trees planted in gardens and streetscapes to native regional species, creating environments accessible to native wildlife such as birds and butterflies. The project scientifically demonstrates its contribution to restoring urban biodiversity through residential greening.
Mercian: Mariko Vineyard	A vineyard established in Ueda City, Nagano Prefecture. The project scientifically demonstrates how grass cultivation restores vast grasslands, conserving soil and ecosystems and thus also enhancing the winery's reputation. The winery collaborates with local residents to implement natural restoration.
KIRIN: Supporting Sustainability and Regenerative Agriculture at Sri Lankan Tea Plantations	In Sri Lanka—a key tea-producing region—Kirin supports Rainforest Alliance certification for large plantations and small farms beyond its direct suppliers, enhancing overall sustainability. Initiatives include educational support for high school students living on plantations and the promotion of transition to regenerative agriculture. Certified products are also sold.

Nestlé: Regenerative Agriculture Program	For key ingredients such as coffee and cocoa, Nestlé supports agroforestry and regenerative agriculture to restore soil health and conserve water resources. By collaborating with farmers, the company builds sustainable supply chains while restoring natural capital.
IKEA: Forest Positive Strategy	This strategy curbs illegal logging by transitioning all global wood sourcing to FSC® certification. The company invests in reforestation and forest restoration projects, aiming for “Forest Positive” by restoring more forest than it consumes.
Kering: Regenerative Fund for Nature	Kering established the Regenerative Fund for Nature in 2021. The company supports the adoption of regenerative cotton farming and regenerative grazing (for leather products), promoting soil and biodiversity restoration. Inditex (operator of Zara) joined the fund in 2023.
Rabobank: Nature Restoration Finance	As a bank specializing in agricultural finance, Rabobank provides financial products supporting the adoption of regenerative agriculture and thus promoting the restoration of farmers’ natural capital. The resulting carbon removal credits are purchased by companies such as Microsoft.

4.3.3 Initiatives in Nature-Based Solutions

Let’s consider how nature-positive activities can contribute to solving various social challenges. In recent years, Nature-based Solutions (NbS) have gained global attention. This approach leverages nature’s inherent functions by restoring, rehabilitating, and sustainably maintaining degraded ecosystems to address challenges such as climate change, disaster risk, and water resource management.

Traditional nature conservation primarily focused on protecting the natural environment itself. However, it is now understood that forest conservation and wetland restoration also contribute to reducing greenhouse gas emissions, stabilizing water resources, and preventing and mitigating disasters. By actively harnessing nature’s processes, localized conservation efforts can evolve into broader, multi-stakeholder initiatives. This approach has the potential to drive larger-scale natural recovery.

○ Regional Nature-Positive Examples

Item	Description
Green Infrastructure	Systematically arranging and maintaining urban green spaces, rivers, wetlands, and forests to perform multifaceted functions such as flood control, temperature mitigation, and biodiversity conservation
Disaster Prevention and Mitigation by Utilizing Ecosystems	Enhancing disaster prevention capabilities by combining the functions of mangrove forests, wetlands, and forests (which provide breakwaters, flood mitigation, and sediment runoff prevention) with hard measures (physical construction).
Climate Change Adaptation Measures Utilizing Ecosystems	Utilizing the stable supply of water resources through the regeneration and restoration of forests and wetlands, the mitigation of heat islands through urban greening, and the buffering of sea-level rise.

4.3.4 Initiatives Referencing the Landscape Approach Perspective

Let’s reexamine activities in specific regions from a broader perspective. By broadening the scope of activities, initiatives may contribute to nature positivity across the entire effort. For example, although forest conservation benefits downstream areas through water source conservation, it can also cause eutrophication, depending on how it is maintained. As wildlife moves across administrative boundaries, initiatives confined to specific areas may be insufficient. Adopting a watershed-wide or broader perspective can help to mitigate unintended consequences while identifying new opportunities for action.

○ Examples of Expanding the Activity Scope

Item	Description
Watershed Management	By treating the entire watershed—including rivers, lakes, and wetlands—as a single ecological unit, natural recovery can be achieved across the entire watershed, even if it is difficult in one specific area.
Ecosystem Corridors	Connecting isolated natural environments at the regional level through green corridors (such as field borders, plantings, and fishways) creates contiguous natural habitats for organisms, leading to overall ecosystem recovery.
Ecosystem Patches	Even small-scale protected areas can be restored as ecosystems when numerous such areas are placed close to each other across a large region. This allows flying organisms to utilize the entire network as a single ecosystem.

4.3.5 Integration into Regional Strategy

Once nature-positive initiatives become established locally and their relationship with industry and daily life becomes clear, explore ways to embed them within the mechanisms of local communities and economies.

Both the TNFD’s Transition Plan and the SBTN’s AR3T framework aim to progressively strengthen actions, moving from reducing impacts on nature to regenerating and restoring natural capital, thus ultimately transitioning society as a whole to a sustainable state. At the regional level, this “shift to a sustainable state” is precisely what integrating nature-positive activities into regional strategy entails.

Achieving a nature-positive initiative locally requires its integration into municipal policies and corporate management strategies. While consensus-building is challenging, advancing this effort is essential for establishing mechanisms for coexistence with nature across the entire region and laying the foundation for a sustainable economy and way of life.

By building on accumulated practices and improvements, let us broaden understanding and support for these initiatives as efforts to create regional value. Specific examples of targets and initiatives are as follows.

○ Examples of Incorporation into Related Organizations' Strategies

Item	Description
Municipalities	• Promote the formulation and implementation of local governments' nature-positive declarations. • Incorporate nature-positive goals into revisions of local government decarbonization declarations, etc. • Incorporate these goals when formulating regional green infrastructure strategies. • Incorporate the goals into nature–culture coexistence strategies linked to ecotourism and other initiatives.
Agriculture, Forestry, and Fisheries	• Incorporate goals into practical guidelines for sustainable agriculture, fisheries, and forestry, and brand them. • Establish a carbon credit system that utilizes natural capital, such as seaweed bed restoration, afforestation, expansion of rice paddy drying, and regenerative agriculture. • Obtain sustainable certification for forests, aquaculture, regenerative agriculture, and brand their products.
Business	• Reflect regional activities in corporate management plans' natural capital strategies. • Position nature-positive activities conducted in collaboration with local communities as a competitive advantage and brand value for the company. • Collaborate on business development utilizing local natural resources. • Establish collaborative agreements involving regions and companies regarding nature-positive initiatives.
Financial Institutions	• Receive "nature-positive financing" through collaboration with regional financial institutions. • Develop financial products and services such as nature-positive bonds (a regional version of green bonds). • Establish a nature restoration fund led by regional financial institutions in collaboration with local governments, companies, and citizen groups.
Central Government Ministries	• Receive policy certification for organic agriculture and sustainable food systems promoted by the Ministry of Agriculture, Forestry and Fisheries, such as Organic Villages (municipalities in Japan that integrate organic farming into regional development). • Receive adoption of support measures for environmentally regenerative agriculture based on the Green Food System Strategy.
Local Communities	• Establish citizen science activities combining scientific monitoring and public participation. • Support and collaborate with local high school activities such as environmental initiatives and community revitalization. • Incorporate nature-positive principles into environmental education in schools.

Local governments handle multiple policy areas simultaneously—including not only the natural environment but also industry, disaster prevention, tourism, welfare, and land use—and involve numerous related organizations. Consequently, reflecting nature-positive principles in policy is not straightforward. It is essential to organize the value of field activities by clarifying how they relate to specific challenges and what direct effects and ripple effects they possess, and to then communicate this as a common language aligned with the local government's decision-making process.

One approach to facilitating this dialogue is to reference the DPSIR (Driving Forces – Pressures – State – Impact – Response) model, introduced in ISO 17298 and utilized in Japan's Environmental White Paper. This model is an environmental assessment framework used widely by organizations such as the OECD and the European Environment Agency. Its key feature is the ability to systematically organize the causal relationships of issues through the flow: Driving forces → pressures → state → impact → response. Referencing the DPSIR model enables your team to present not merely an "introduction to environmental activities" to local governments, but rather "project design materials" that serve as effective decision-making tools for policy, budget, and collaboration.

○ Example of Dialogue with Local Governments by Using DPSIR

Perspective	Example of Content Presented from the Field	Example of Communication Approach Easily Understood by Local Governments
D: Background and Social Factors	In the region, the aging of farmers and other factors are making it difficult to manage local water and land resources.	Population decline and a shortage of agricultural workers have led to an increase in the abundance of unmanaged land, with impacts on ecosystems and livelihoods becoming apparent.
P: Pressure and Load on Nature	With fewer plants, the ground has hardened, making it more difficult for rainwater to soak in. This makes flooding more likely during heavy rains.	Changes in land use and management have weakened the water cycle and ecosystem functions, thus increasing disaster risks and environmental burdens.
S: Natural State Changes	In rice paddies and wetlands, the number of creatures such as dragonflies and frogs has decreased owing to the land's reduced water-retention capacity.	The water-retention capacity of local forests and farmland has declined, ecosystems have been damaged, and the overall quality of the natural and living environment has deteriorated.
I: Impact on Local Communities	Heavy rains cause flooding and soil erosion, damaging crops and reducing income. Tourism and community activities that utilize nature are also declining.	Beyond economic activities such as agriculture and tourism, impacts are spreading to disaster prevention and daily security, thus gradually reducing regional sustainability.
R: Desired Response and Collaborative Framework	Farmers, local organizations, universities, and others are collaborating to restore water-retention capacity, purification capabilities, and ecosystem functions. We aim to advance this by positioning our initiative within regional plans and decarbonization measures in cooperation with local governments.	Our initiative can be promoted as a regional revitalization project utilizing natural mechanisms, capable of linking with climate adaptation plans and disaster-prevention infrastructure development. It can be positioned as an integrated effort to strengthen the economy, environment, and disaster prevention.

Nature-based Solutions

IUCN Global Standard for NbS (https://portals.iucn.org/library/sites/library/files/documents/2020-020-En.pdf)

> “Nature-based Solutions are actions to protect, sustainably manage, and restore natural or modified ecosystems that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits.”

Transition Frameworks

TNFD – Guidance on Transition Planning (Draft) (https://tnfd.global/publication/discussion-paper-on-nature-transition-plans/)

> “Delivering the transition implied by the GBF [Kunming–Montreal Global Biodiversity Framework] will require significant changes to business practices across all sectors. Transition planning offers a way to manage an organization’s responses and contributions to this transition in a coherent, structured way.”

SBTN: Science-Based Targets for Nature – Initial Guidance (Executive Summary) (https://sciencebasedtargetsnetwork.org/wp-content/uploads/2021/03/SBTN-Initial-Guidance-executive-summary.pdf)

> “The AR3T framework (Assess–Respond–Reassess–Report–Transition) guides companies and cities through a cyclical process: assessing their impacts and dependencies on nature, responding with actions, reassessing progress, reporting transparently, and ultimately transitioning towards nature-positive outcomes.”

Table 4.3 Spiral Up to Nature-Positive Activities

	What to Do	What to Avoid
4.3.1 Initiatives Referencing Regional Examples	• Visit regions with nature-positive examples and learn directly from those responsible.	• Attempting to cherry-pick best practices without understanding the context of local activities, resulting in superficial efforts that ultimately fail
4.3.2 Initiatives Inspired by Corporate Examples	• Understanding that conditions differ between corporations and local communities, apply corporate activity logic models to local contexts for reference.	• Imitating initiatives without understanding the financial resources that make them possible, thus causing plans to become overly ambitious and unfeasible
4.3.3 Initiatives in Nature-Based Solutions	• Explore how resource conservation activities can be leveraged to address local challenges. • Increase participant motivation by linking resource conservation activities with local government conservation projects (e.g., flood prevention through forest conservation activities).	• Not considering effects on the local ecosystem in reforestation projects aimed at generating carbon credits
4.3.4 Initiatives Referencing the Landscape Approach Perspective	• Evaluate potential synergies between your organization's projects and nearby natural restoration activities to foster collaboration (e.g., collaboration between grassland restoration and forest restoration).	• Using single-species afforestation in forest management, thus leading to excessive organic matter runoff from leaf litter and causing downstream eutrophication that harms fisheries
4.3.5 Integration into Regional Strategy	• Build sufficient trust among relevant organizations through activities, thus enabling municipalities and businesses to recognize the value of regional activities and incorporate them into their respective strategies.	• Pressuring local governments to issue a nature-positive declaration at the very start of activities, thus straining relationships and stalling subsequent progress

Conclusion

This guide was compiled to systematically organize procedures and approaches for addressing diverse challenges encountered in the field in the implementation of nature-positive practices. Its aim is to serve as a common guideline that transcends disciplinary boundaries.

Positioned as a guide for those starting nature-positive activities from scratch, it systematically compiles essential practical points while referencing international frameworks such as the TNFD Guidance, LEAP Approach, and ISO 17298. Consequently, the content is wide ranging and the manual is long. However, we have strived to use straightforward language so that even beginners can understand and implement the guidance by following the steps sequentially.

Nature-positive initiatives are still in their infancy, and the development of scientific approaches and accumulation of knowledge are ongoing. We recommend finding experts to advance the scientific approaches, as well as coordinators and facilitators with sufficient experience; these are not easy tasks. Indeed, challenges abound, including the need to consider the distinct natural characteristics, cultures, and historical backgrounds of each region.

However, nature is currently in a critical state. If we do not act now, achieving the international goal of Nature Positive will become difficult, and precious nature will be lost. As this guide also points out, the loss of nature will substantially impact both local industries and livelihoods that depend on its ecosystem services. This is precisely why we need to promote nature-positive initiatives by treating nature restoration and industry/livelihoods as an integrated whole, using the landscape approach perspective that comprehensively addresses diverse challenges.

Many of the initiatives now referred to as “nature positive” have been realized through long-term, persistent efforts spanning 5, 10, or more years. We hope this guide will contribute to the development of sustainable activities that are meaningful for local communities, society, and future generations and are based on a long-term perspective.

We plan to revise the plan periodically on the basis of feedback from the field and the accumulation of new knowledge.

TNFD Guidance Comparison Table

TNFD Guidance Item[1]	Main Content[2]	Corresponding Section in This Guide	Main Implementation Details/Remarks
1. Governance	• Disclose the organization's governance of nature-related dependencies, impacts, risks, and opportunities.	• 1.2.1 Launch • 1.2.2 Clarifying the Purpose • 1.2.3 Establishing the Team Structure	• Establishment of regional teams, secretariat, experts, and facilitators • Establishment of activity policies and rules • Clarification of decision-making structures among stakeholders
2. Strategy	• Disclose the impact of nature-related dependencies, impacts, risks, and opportunities on the organization's business model, strategy, and financial plans, where such information is material.	• 1.3.1 Understanding the Basic State of the Region and Nature • 1.4.4 Identifying Priority Issues • 1.4.9 Setting Goals • 1.5.1 Verifying Goals Through Logic Model Development • 1.5.2 Formulating the Vision • 4.3.5 Integration into Regional Strategy	• Extraction of risks and opportunities from dependencies and impacts • Scenario analysis • Organization of priority issues and strategic directions • Clarification of the positioning of nature-related issues in the region
3. Risk & Impact Management	• Describe the processes the organization uses to identify, assess, prioritize, and monitor its nature-related dependencies, impacts, risks, and opportunities.	• 1.3.1 Understanding the Basic State of the Region and Nature • 2.1 Defining the Scope of Activities • 2.2 Formulating Activity Plans • 3.3 Analysis of Monitoring Results and Activity Evaluation • 4.1 Activity Improvement • 4.3 Spiral Up to Nature-Positive Activities	• Process for identifying dependencies, impacts, and risks • Process for maintaining and responding
4. Metrics & Targets	• Measures and targets used to assess and maintain material nature-related dependencies, impacts, risks, and opportunities.	• 1.4 Setting Goals • 1.5 Establishing the Logic Model and Vision • 3.3 Analysis of Monitoring Results and Activity Evaluation • 4.2 Information Disclosure and Engagement	• Nature-related goal setting • Establishing and verifying indicators for progress measurement • Monitoring • Obtaining feedback through engagement

Source: Taskforce on Nature-Related Financial Disclosures (TNFD) Recommendations v1.0 (September 2023)

[1] Quotes TNFD v1.0 guidance items

[2]Author's summary and citation of each TNFD v1.0 item

LEAP Approach Comparison Table

Stage[1]	Main Content of TNFD[2]	Corresponding Section in This Guide	Main Implementation Details/Remarks
Scoping Organize the Overall Scope, Assumptions, and Framework of the Activity	• Identify locations where nature-related issues are likely to exist • Evaluation period • Consideration of knowledge, capabilities, data, and financial costs	• 1.2.2 Clarifying the Purpose • 1.2.3 Establishing the Team Structure	• Defining the scope of activities and evaluation • Clarification of natural elements, regions, and issues • Resource estimation
L: Locate Identify Relationships with Nature	• L1: Scope of Business Model and Value Chain • L2: Dependency and Impact Screening • L3: Points of Contact with Nature • L4: Interactions with Areas of Concern	• 1.3.1 Understanding the Basic State of the Region and Nature • 1.3.2 Identifying Connections with Nature • 2.1 Defining the Scope of Activities	• Understanding regions, watersheds, and ecosystems • Setting spatial scale and evaluation scope
E: Evaluate Assess Risks and Opportunities	• E1: Identify Environmental Assets, Ecosystem Services, and Impact Factors • E2: Identify Dependencies and Impacts • E3: Measure Dependencies and Impacts • E4: Assess the Materiality of Impacts	• 1.3.3 Identifying Factors Affecting Nature • 1.3.4 Identifying Natural Benefits (Ecosystem Services) • 1.3.5 Identifying Dependencies and Impacts • 3.3.2 Effect Measurement	• Identification of ecosystem services • Understanding, organizing, and measuring dependencies and impacts
A: Assess Evaluate Response Policies and Scenarios	• A1: Identification of Risks and Opportunities • A2: Alignment of Existing Risk Mitigation and Risk and Opportunity Management • A3: Measuring and Prioritizing Risks and Opportunities • A4: Assessing the Materiality of Risks and Opportunities	• 1.3.5 Identifying Dependencies and Impacts • 1.3.6 Risk and Opportunity Assessment • 1.4.3 Confirming Resources (Activity Resources) • 1.4.5 Setting Targets and Approaches • 1.4.6 Consideration of Global Goals • 1.4.7 Consideration of Scientific Evidence • 1.4.8 Considering Better Prioritization • 1.4.9 Setting Goals • 1.5.1 Verifying Goals Through Logic Model Development • 1.5.2 Formulating the Vision	• Prioritizing dependencies and impacts • Prioritizing risks and opportunities • Setting goals and indicators • Establishing the vision • Visualizing the logic model
P: Prepare Prepare for Response, Disclosure, and Monitoring	• P1: Strategy and Resource Allocation Plan • P2: Target Measurement and Performance Management • P3: Reporting • P4: Disclosure	• 4.1.1 Review of Objectives • 4.1.2 Review of Activity Plans, Manuals, and Systems • 4.2.1 Disclosure Content • 4.3.5 Integration into Regional Strategy	• Progress and challenges • Confirming the required resources • Reviewing goals and resource allocation • Transparent disclosure • Formulation of transition strategy

Source: Guidance on the Identification and Assessment of Nature-Related Issues: The LEAP Approach v1.1 (October 2023)

[1] Quoting the stages of the LEAP Approach v1.1,[2] Author's summary and citation of each stage of TNFD v1.0.

ISO 17298 Comparison Table

Comparison between this document and the international standard on biodiversity assessment ISO 17298:2025

Main Structure of ISO 17298[1]	Corresponding Items in This Guide	Main Implementation Details/Remarks
1. Scope	Introduction: • Target Users of This Document • How to Use this Document • Structure of This Document	• Prerequisite understanding for starting implementation
2. Normative References	1.1 Creating the Initial Momentum (First Step) • Citation sources are provided where necessary	• Citation of background, underlying frameworks, and literature
3. Terms and Definitions	• Include as appropriate where necessary	• Explanation of ecological and business terminology
4. Context of the Biodiversity Approach	1.2 Team Building 2.1 Defining the Scope of Activities	• Understanding information related to the Nature-Positive Initiative • Initiation and team building • Confirming the geographic scope • Understanding natural hierarchies and habitat
5. Involvement of Interested Parties	4.1 Activity Improvement 4.2 Information Disclosure and Engagement	• Identifying and organizing stakeholders • Strengthening internal and external collaboration • Expanding Awareness
6. Identifying and Prioritizing Biodiversity Impacts, Dependencies, Risks, and Opportunities	1.3 Understanding the Natural State and Sharing Challenges 1.4 Setting Goals	• Identifying natural benefits (ecosystem services) • Identifying dependencies and impacts • Assessing risks and opportunities • Defining activities and approaches
7. Formalizing the Biodiversity Action Plan	1.4 Setting Goals 1.5 Establishing the Logic Model and Vision 2.2 Formulating Activity Plans	• Clarifying activity objectives • Preparing and establishing the operational framework • Formulation and dissemination of vision • Selection of activity content • Creating plans and timelines
8. Communication	1.2 Team Building 4.1 Activity Improvement 4.2 Information Disclosure and Engagement	• Identifying and organizing stakeholders • Review of activity plans, manuals, and structures • Engagement
9. Implementation, Monitoring, and Review	3.2 Field Activities 3.3 Analysis of Monitoring Results and Activity Evaluation	• Preparation for activities • Activity execution and safety management • Data analysis and effectiveness measurement
Annexes A and B	Introduction: • How to Use this Document Citations and examples provided where necessary	• Citations for frameworks, literature, and specific examples

Source: ISO (2025). ISO 17298:2025–Biodiversity—Guidance for biodiversity measurement and assessment. International Organization for Standardization, Geneva.

[1] English text quoted from the table of contents of ISO 17298:2025; Japanese text quoted from the author's translation of the table of contents

Reference:

TNFD recommends that the Impact and Dependency Pathways diagram be used to organize the relationship between these nature-related dependencies and impacts and industries and livelihoods.

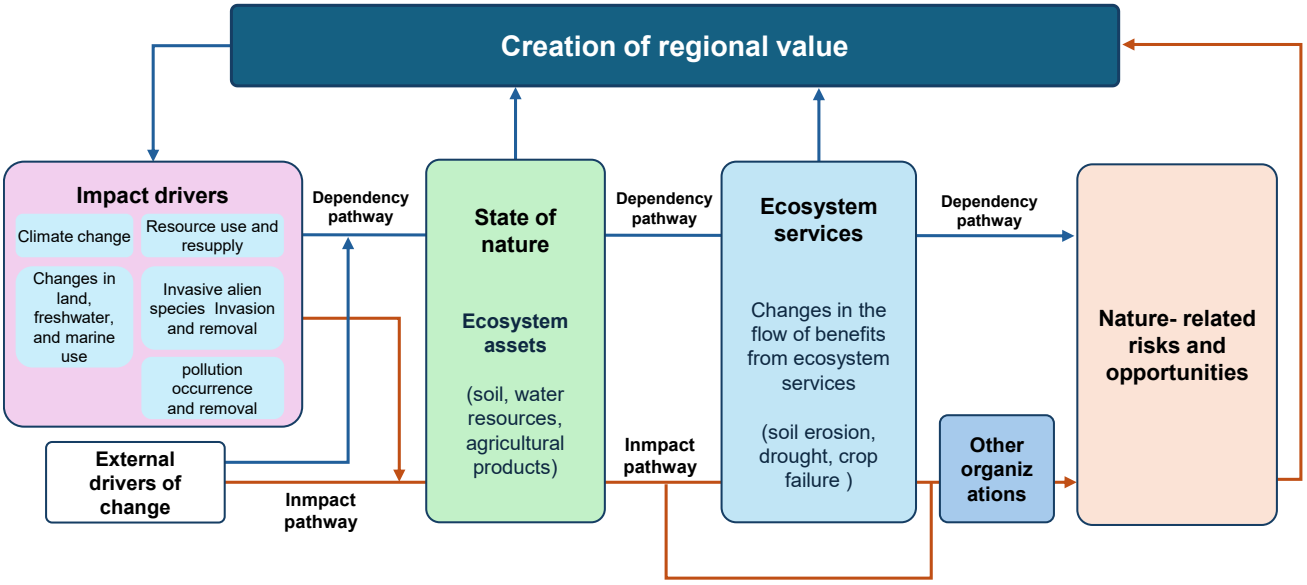


Figure 16: Diagram of impact and dependency pathways

○ TNFD Risk and Opportunity Classification

Category	Item	Description
Risk	Physical Risk	• Acute: Sudden natural disasters (e.g., floods, wildfires) • Chronic: Long-term progressive impacts (e.g., drought, soil degradation)
	Transition Risk	• Policy: Changes in environmental regulations (e.g., eco-friendly sites) • Market: Changes in consumer preferences or market structure (e.g., increased recognition of certified products) • Technology: Adoption of new technologies or changes in required raw materials (e.g., regenerative agriculture) • Reputation: Regional or corporate image (e.g., river or soil pollution) • Legal: Compensation for environmental damage (e.g., illegal industrial waste dumping)
	Systemic Risk	• Catastrophic impacts from damage to specific natural areas (e.g., large-scale landslides caused by deforestation for mega-solar projects)
Opportunities		• Resource Efficiency: Improvement of utilization efficiency of water, energy, etc. (e.g., water conservation) • Products and Services: Nature-conscious manufacturing and products (e.g., regenerative agriculture) • Market Access: Sustainable procurement (e.g., customer acquisition through certification products) • Financing/Investment: ESG investment (e.g., carbon credits, bioenergy generation) • Resilience Enhancement: Improving regional and business continuity (e.g., disaster prevention using nature) • Reputation Enhancement: Gaining recognition and trust through nature conservation efforts (e.g., ecotourism)

○ The “Four Crises” Threatening Japan’s Biodiversity

First Crisis: Threats from human activities such as development
Second Crisis: Threats from reduced human interaction with nature
Third Crisis: Threats from introduced species
Fourth Crisis: Threats from global environmental change

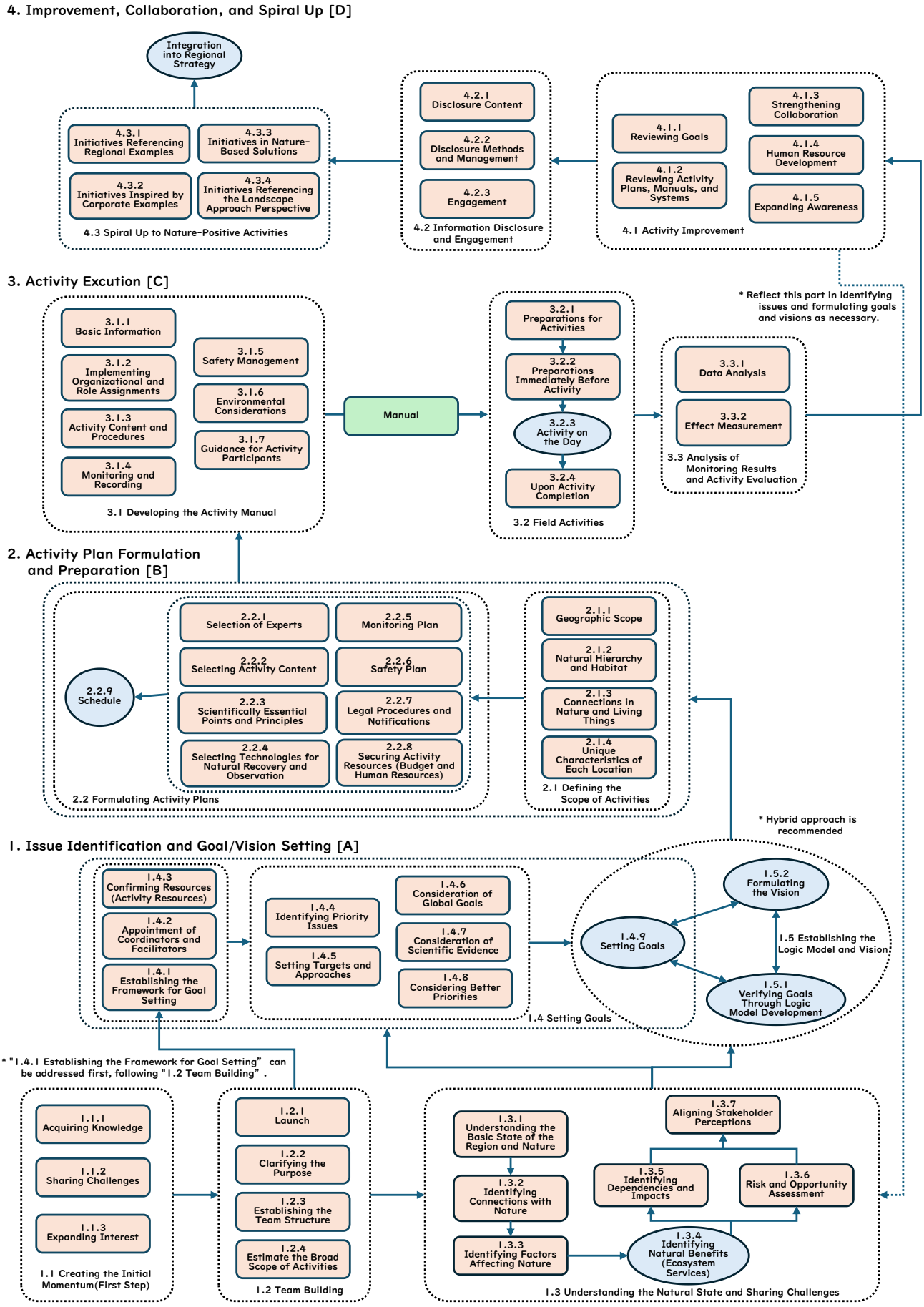


Figure 17: Overall structure diagram for each item in this document

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