

# Delta Plan for Biodiversity Recovery

*Taking Action for a  
Richer Netherlands*

TOGETHER FOR

**BIODIVERSITY**





## Working together for biodiversity

The current strategy to stop the loss of biodiversity in the Netherlands has produced insufficient results, despite many years of effort by numerous land users. Restoring the variety of species, ecosystems and landscapes is important for a richer nature, as well as forming the foundation of our health and prosperity. A living, resilient soil along with sufficient pollinating insects are at the core of healthy and future-proof food production. This necessity was recognized in the government memorandum 'Agriculture, nature and food: valuable and connected' presented by the Minister of Agriculture, Nature and Food Quality in September. The major change required must start with a change of mindset.

For that reason, farmers' organizations, food supply chain partners, researchers, nature and environmental organizations as well as a bank have joined forces for the first time to reverse biodiversity loss in the

Netherlands and embark on the road to recovery. We can see how important it is that we do more and are prepared to work together on a strategy that will make a real difference. In doing so, we want to embrace existing initiatives and expand them where necessary, as well as to work together on developing new initiatives. With the Delta Plan for Biodiversity Recovery, we aim to use our knowledge, prosperity and energy to create a Netherlands where people and nature can flourish side by side. We hope that the Netherlands can become an example of a densely populated delta where biodiversity and economic development are interconnected, thus guaranteeing our quality of life – and that of future generations.

At the heart of our strategy is a broad cooperation between farmers, nature conservation organizations, private individuals, researchers, and governments at the regional level.

In addition, we acknowledge that everyone can inspire and incentivize these land users to realize more favorable conditions for biodiversity. Standardized performance measurement allows land users to accumulate result-based-payments and other benefits from different sources. We will also have a better understanding of how measuring performance can positively impact biodiversity.

The Delta Plan identifies five success factors that make it simple and attractive for land users to contribute to the restoration of biodiversity. These five success factors are: shared values, development of new business models, incentivizing and consistent laws and regulations, knowledge and innovation, and collaboration with all regional land users. Biodiversity recovery is our joint responsibility and everyone can make a positive contribution to these success factors.

Reversing biodiversity loss is achievable only if we choose an integrated, comprehensive strategy. Biodiversity recovery cannot be viewed in isolation and is connected to a number of challenges such as adapting to climate change, the future of farming, creating an attractive environment for living, working and recreation and complying with various international commitments relating to the quality of nature, the environment, soil, water and air.

These challenges motivate us to start involving more stakeholders as soon as possible, including public authorities and others that do not yet have a seat at the table, in order to increase the chances of success. We are starting tomorrow and invite everyone to join our movement and do their part.



## Why a Delta Plan?

The rapid decline in biodiversity, in contrast to the energy transition, has only recently become a high priority on the public agenda. A key driver in bringing this issue to public attention was a scientific study showing that around 75% of the insect biomass in German nature reserves has disappeared since 1989, with similar trends observed in the Netherlands. Last summer, these concerns about the decline in insects – which occupy a crucial position in the food supply chain – placed biodiversity firmly on the radar of many segments in society. A few months later, scientists, farmers' organizations, nature and environmental organizations, banks and food supply chain partners signed the Driebergen Declaration (November 2017) to express the necessity of working together to restore biodiversity.

A number of these parties ('the Core Group') then took it upon themselves to formulate this Delta Plan with a single purpose: to create a richer and more varied natural environment in the Netherlands. The Core Group are: Agrifirm, BoerenNatuur (Farmers&Nature), Centraal Bureau Levensmiddelenhandel (Dutch Food Retail Association), Duurzame Zuivelketen (Sustainable Dairy Chain), LTO Nederland (Dutch Organization for Agriculture and Horticulture), Naturalis Biodiversity Center, Natuur en Milieu Federaties (Nature and Environment Federations), Natuurmonumenten (Dutch Society for Nature Conservation), Netherlands Ecological Research Network (NERN), Rabobank, Stichting Veldleeuwerik (Skylark Foundation), De Vlinderstichting (Dutch Butterfly Conservation) and WWF NL (World Wide Fund for Nature).



## A new mindset

A real change towards biodiversity recovery requires a change in the existing strategy. This change will require a 'rethink' or new mindset from all stakeholders. The new mindset involves connecting performance of biodiversity restoration by land users to sufficient social recognition and financial rewards. Changing our mindsets also means that we must work from a shared dot on the horizon to coordinate efforts and ensure that land users' actions are mutually reinforcing and incentives are aligned towards the common goal of biodiversity recovery. As a starting point, we have formulated a

shared vision for 2030 to provide direction for the further explanation of the Delta Plan (see pages 6–7).

Changing our mindsets also requires us to recognize that knowledge is limited about the actual relationship between the efforts of land users and biodiversity recovery. As a result, it is important that we offer land users the right tools and incentives, while at the same time we invest in the process of 'learning by doing' through effective monitoring of results and collective knowledge development.







## Our vision for 2030: a thriving delta for people and nature

In 2030, the green spaces of the Netherlands support a rich biodiversity of soil life, plants, insects and farmland birds. The landscape sparkles with diversity and people enjoy the quality of life, work and recreation. Regional landscapes are recognizable by their vegetation and people identify with and are proud of their region.

Dutch residents value biodiversity and act accordingly, both as citizens and as consumers, to contribute to nature-rich landscapes. The activities of governments and semi-government bodies, all the businesses in the agricultural value chain (farmers, traders, producers and retailers) and nature conservation organizations reinforce each other in intelligent ways, supported by innovative economic models, laws and regulations. The high levels of biodiversity are maintained through the management of nature in nature reserves, agricultural production systems and public spaces.

Management of land by nature conservation organizations is optimal for strengthening the biodiversity that is characteristic of each region, for which they receive appropriate financial support from members and the government. Nature reserves are effectively connected to each other through other nature reserves, agricultural areas and/or public spaces, which means the management of both nature reserves and farmland are coordinated and strengthened.

Circular agriculture has become the production model for living, healthy soils, making use of functional biodiversity, and supported by technological innovations. As a result, the quality of water, soil and air is good. Farmers produce high-quality, healthy products. And, society, including consumers, values farmers for their role in the food supply chain and their commitment to using sustainable production systems. Farmers earn a fair price for their products and the biodiversity benefits realized in their production. In addition, farmers receive attractive remuneration from food supply chain partners as well as the government for the protection and recovery of biodiversity and agri-environmental services through nature and regional management. The business model is sufficiently compelling to ensure the succession of farming by future generations.

In addition to safety and attractiveness, biodiversity and landscape identity are core objectives for the management of public spaces by government and semi-government bodies. Expansion of construction areas and infrastructure is carried out in such a way that it promotes nature, stimulates collaboration with other land users and has a positive effect on nature in the surrounding rural areas.

All this is achieved through a customized, regional landscape approach creating a win-win for the management of nature, agriculture as well as public spaces. The effects of land use design and management on biodiversity, as well as the public and financial recognition for these result-based efforts, are continuously monitored using a number of straightforward indicators. This approach allows for the continuous adaption of Dutch nature to a permanently changing society and changing climate to ensure that biodiversity is maintained for future generations.



## Our scope: the green spaces of the Netherlands and everyone who has an impact on them

Our scope is to recover biodiversity in the three main land use forms of the Netherlands. These are also the areas in which we think that the greatest gains can be achieved.

- Nature
- Agriculture
- Public spaces

Collectively, these areas cover approximately 90% of the Netherlands. Land users such as nature conservation organizations, farmers and municipal authorities can make a crucial contribution to biodiversity recovery. To do so, they need all the support they can get

from stakeholders which can have a positive impact by valuing their efforts and rewarding them: businesses, public authorities, social organizations, banks, landowners, consumers, citizens, and so on. Involving, attracting and encouraging all these stakeholders to join us in our efforts is an important component of our strategy.

Although it does not focus on cities, the Delta Plan fits in well with the various biodiversity initiatives in the built environment. Moreover, major urban challenges such as housing construction, climate adaptation and energy transition offer a unique opportunity to improve biodiversity in and around the built environment.

## Our strategy: encouraging land users to restore biodiversity

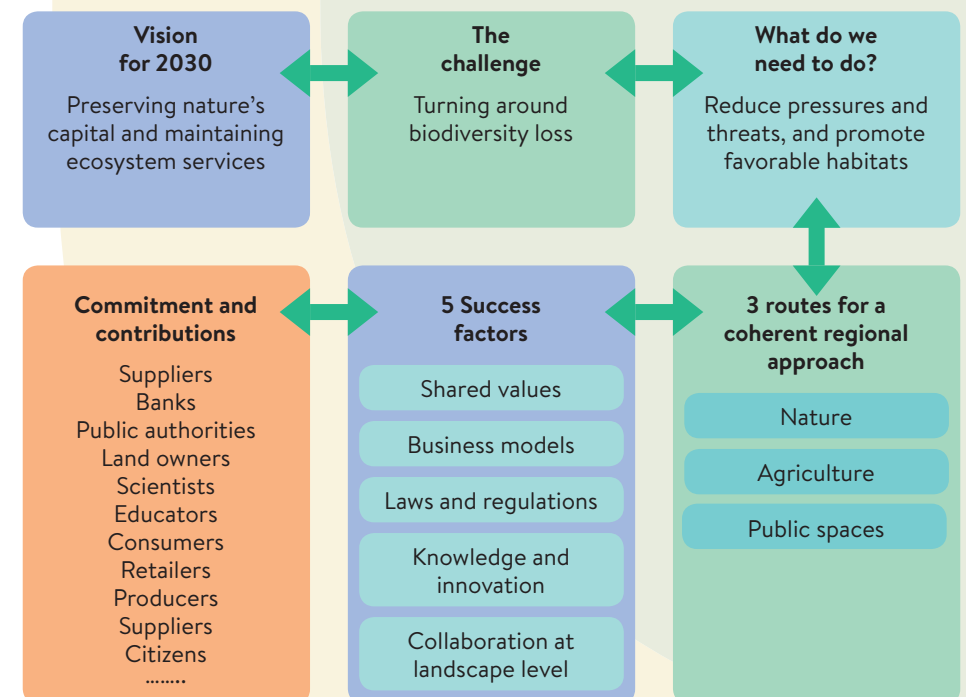
Through the Delta Plan, we want to encourage land users in rural areas, agriculture and public spaces to make the right choices and achieve cohesive results at the regional level in order to contribute to the recovery of biodiversity. We have identified five success factors which will ensure that land users are willing to, are allowed to and are able to contribute to biodiversity recovery.

The five success factors are:

1. Shared values
2. Development of new business models
3. Laws and regulations
4. Knowledge, innovation and education
5. Collaboration on regional landscape level

Figure 1 shows success factors are key in achieving our vision for 2030. By incentivizing, recognizing and facilitating land users, we can reduce pressures and threats that hinder the biodiversity recovery, such as eutrophication, aridification, acidification, pollution and fragmentation, and can promote favorable habitats for wild animals and plants. This can be achieved through higher prices for products, lower interest rate through the bank, subsidies, new insight about beneficial insects, and so on.

**Figuur 1: Our story of change**



After identifying the success factors, it is clear that the ball is in everyone's court: we are all responsible for biodiversity recovery. The commitment of food chain partners, businesses, banks, public authorities, retailers, citizens, consumers, social organizations and landowners in the form of specific contributions to the success factors, and hence to the change that is necessary in order to restore biodiversity, is crucial to the success of the Delta Plan. We do not want to wait – and we cannot afford to wait – until the entire strategy is complete.

Instead, we have chosen to follow a process of 'learning by doing', in which we aim to involve as many stakeholders who want to work with us as possible.

As the Core Group, we have formulated a number of specific commitments below to show that the Delta Plan is not merely a theoretical exercise and that we are serious about implementing it. By involving other stakeholders and encouraging each other, the implementation of the Delta Plan – and hence the positive impact on biodiversity – will be accelerated.

## The five success factors which collectively encourage land users

**Shared values** – As a core group we have come together around shared values, but we are fully aware that we need the support and efforts of other stakeholders to achieve biodiversity recovery. We therefore act as ambassadors for the Delta Plan philosophy, to actively rally other stakeholders around our common vision, accept their responsibility, join our initiative and take action to restore biodiversity.

**Business models** – Bending the curve of biodiversity loss will be accelerated with proper incentives for land users (farmers, public authorities, nature conservation organizations, landowners and actors in public spaces). Appropriate business models and result-based payments can turn protection and recovery of biodiversity from a cost item into a source of income. Developing business models for biodiversity recovery involves more than paying higher prices for products. In fact, all relevant stakeholders can contribute to this process. Banks can apply lower interest rates on loans, nature conservation organizations can charge lower rental fees on agricultural land leases, and public authorities can ease the processes for permits, tax instruments and subsidies, based on the biodiversity performance of land users. Furthermore, farmers could be rewarded for their efforts through a Biodiversity Fund where private and public parties can contribute directly. These benefits will make it easier and more appealing for land users to make nature-friendly choices.

**Laws and regulations** – With improvements in the laws and regulations, the government can support the contributions of farmers and other land users towards biodiversity recovery. Laws and regulations need to focus on the goals rather than on specific measures, need to be integrated across governing bodies, and the whole set of laws and regulations needs to be consistent. Incentives and consistent laws and regulations would also ensure that innovators are rewarded and that those who lag behind have fewer opportunities not to comply with the rules (reducing 'free-rider' behavior).

**Knowledge, innovation and education** – There are clear gaps in our knowledge of biodiversity, its functioning and how to restore and strengthen it. The impact of specific measures, how to measure success using an integrated approach and whether this translates into ecological restoration are often not well known. At the same time there are many initiatives that are tested scientifically and in practice. Their lessons learned should be integrated in education programs and they may be applied more broadly. The Delta Plan is based on the best, albeit often incomplete, knowledge available. We will not wait until we gain full scientific confidence, but act on existing knowledge and learn along the way. We refer to this as the 'learning by doing' principle. We will make maximum use of the numerous initiatives that are already under way and develop them into living labs where desirable. To the extent necessary, we will initiate new living labs.

**Collaboration on the regional landscape level** – Success will primarily be achieved on the regional landscape level, as populations of animals and plants are rarely restricted to a single field, garden or road edge, and management practices of all land users in an area affect each other. Consequently, biodiversity will benefit most if all land users in a region collaborate and align their management practices. We do not define 'regional landscapes' as fixed geographical, ecological or legal entities. The boundaries of a regional landscape are determined by the nature of the collaboration and the way that stakeholders relate to each other and interact to achieve biodiversity benefits. By focusing on cohesion within a landscape, we aim to prevent fragmentation of efforts, facilitate stacking of result-based rewards and accelerated delivery of tangible results. The ultimate ambition is to scale up from the regional landscape level to nationwide coverage of our efforts and impact. To do so, guidance from the national and/or regional authorities level will be necessary to maintain focus on our goals and develop strategies for the 'blank spots' - regions where there is currently no collaboration at all.







## Appreciating and rewarding land users: working with Key Performance Indicators

In addition to the success factors to stimulate land users to make the right choices, the Delta Plan also introduces the need for an integrated set of key performance indicators (KPIs). These KPIs will provide land users insight into their contributions to favorable conditions for biodiversity. Rather than measuring the resulting biodiversity impact itself, the KPIs measure biodiversity-based **performance within the span of control of land users.**

The KPIs for different types of regional landscapes and land users are to be

determined. Land users in the dairy farming sector are already working along these lines, using a Biodiversity Monitor that has a comprehensive set of KPIs. For example, the percentage of herb-rich grassland is a KPI, but the number of meadow birds is not. While dairy farmers have no direct influence over the latter, they do over the former (see box). For public spaces, we are thinking of KPIs for tendering processes where companies indicate in their bids how they will strengthen biodiversity, which would give them a preferential position over those who do not score as well on that aspect.

## The Biodiversity Monitor for Dairy Farming

The Biodiversity Monitor for Dairy Farming uses key performance indicators (KPIs) to measure the influence of individual dairy farms on biodiversity on the farm and beyond. This makes it possible to monitor the role of dairy farmers in the preservation of the landscape and the environment using a standardized system. In addition to providing a metric for assessing the impact on the environment (both positive and negative), the monitor proposes specific measures dairy farmers can take to improve biodiversity. These include measures such as increasing the amount of permanent grassland in the building plan, over seeding clover in the grassland and postponing the first mowing. This ensures that the monitor provides an action perspective for dairy farmers.

Key criteria in the selection of KPIs are integrality and measurability. This means that the set of KPIs can be used to collectively quantify the performance of dairy farmers in an integrated manner with the objective of improving biodiversity. This relates to biodiversity on dairy farms and their immediate environment, nature reserves throughout the Netherlands, and biodiversity outside the Netherlands.

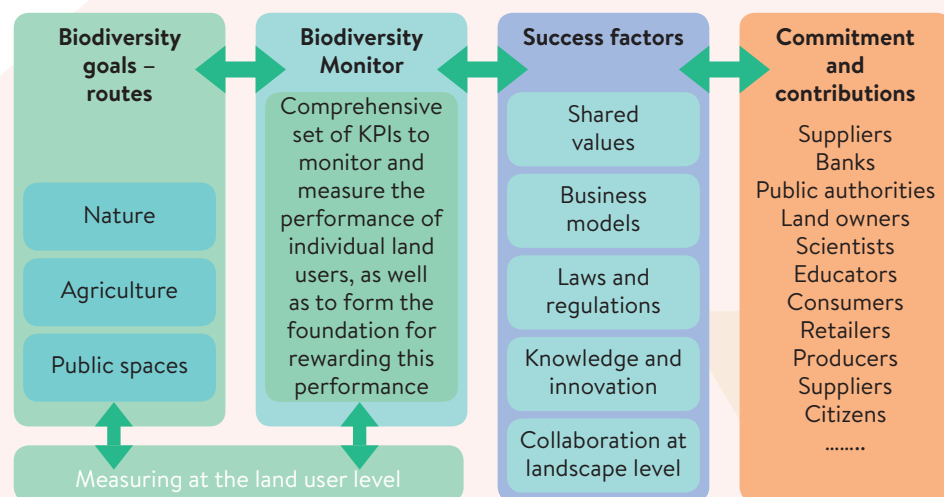
The Biodiversity Monitor enables comparisons between dairy farms and on individual farms over time. It is important that the performance reflected in the KPIs is ultimately tested against observable results for biodiversity on and around dairy farms. For this purpose, long-term monitoring and research are required. It is also important to keep the Biodiversity Monitor user-friendly by limiting the number of KPIs to only those that are necessary for a good, comprehensive representation of biodiversity performance.



An integrated set of KPIs can be the foundation for all stakeholders concerned (public authorities, banks, landowners that lease land to farmers, and so on) to provide land users with insights into how they perform in relation to biodiversity. It also facilitates and encourages positive action by providing recognition and rewards for good performance. Using a common set of KPIs allows for benefits and rewards from a variety of stakeholders to be stacked,

further incentivizing positive action by land users. The choice of management practices to improve the KPI result is up to each individual land user. This assures autonomy to achieve results in the way that is best suited to each own's specific circumstances (farm type, value chain commitments, soil type, landscape, and so on). *Figure 2* illustrates how a set of KPIs can be used as a tool to stimulate land users to contribute to biodiversity protection and recovery.

**Figuur 2: Biodiversity Monitor (comprehensive set of KPIs) as a tool for rewarding, encouraging, facilitating and recognizing the contribution of land users to biodiversity recovery**



## To measure is to know: moving towards a new, integrated monitoring system

While we already know a great deal about the state of biodiversity and the causes of biodiversity loss, we still do not know enough about what efforts and performances are necessary to reverse the trend of declining biodiversity and to begin the journey towards recovery. We need more knowledge and a greater understanding of what efforts make a

positive contribution to biodiversity, how different types of efforts correlate, and which adjustments may still be necessary to make biodiversity gains.

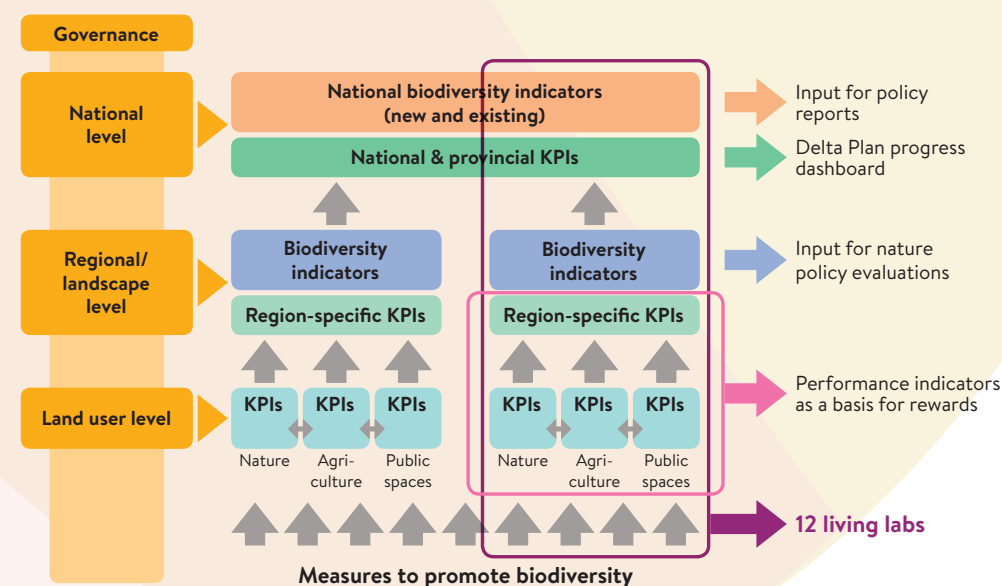
The recovery of biodiversity is primarily determined by cohesion among, and the sum of, all efforts and performances by a variety of land users in a specific area.

However, we are presently not always capable of providing a reliable answer to the question of what intervention is needed to reverse the downward trend. With the Delta Plan, we are consequently aiming to set up a monitoring system that will provide insights into: (i) the trends in key biodiversity indicators at the national or landscape level, and (ii) the way that these indicators are related to the efforts and performance of land users in specific regional landscapes.

The proposed monitoring system is based on measuring success at three levels: the national (or provincial) level, the regional level and the land user level (e.g. an agricultural enterprise, a nature reserve or the public spaces of a particular municipality). Monitoring at the national or provincial level is primarily focused on establishing whether the main objective of the Delta Plan for Biodiversity Recovery is being achieved: to reverse the downward

trend in national biodiversity and turn it into an upward trend. Monitoring at the regional level is aimed at determining trends and their links to the performance of collaborating land users, so we can learn from experience and apply those lessons to improve in future. To this end, the relationship between measures, KPIs and biodiversity indicators must be established at the land user and landscape levels. This process will require detailed data collection, which is expensive. As a result, this monitoring of effects will mostly be limited to a representative selection of living labs. In all situations, we will try to be smart and link up with the many initiatives that are already collecting data. The relationships between KPIs and biodiversity indicators established in living labs can then be used to scale up the effects of efforts and turn them into provincial or national trends. The structure is illustrated in diagram form within the figure below.

**Figuur 3: Proposed structure for a new monitoring system**





## How to achieve biodiversity recovery? Our short-term goals

The Delta Plan is a work in progress. In fact, it will never finish. Below, as the first step towards fleshing out our strategy, we have formulated a number of initial objectives for the three routes (nature, agriculture and public spaces) and for the monitoring system.

We have also formulated our ambitions and the contribution that we as Core Group intend to make. However, to achieve the objectives, we need other people – an important reason to engage with the public and work together with the stakeholders that are necessary for the success of our strategy.

### Nature route

Nature reserves are extremely important to most plants and animals. The most rare and threatened species can primarily be found there. Promoting biodiversity is a key objective in nature reserves. Dutch nature reserves are effective in the sense that the population size of species is stable on average. However, this is mainly the result of positive population trends of common and very common species.

The decline of more critical species is mainly caused by processes outside of the nature reserves. Ongoing developments in housing construction, agriculture, industry and transport have resulted in the fragmentation, dehydration, acidification and eutrophication of nature reserves. Work to restore biodiversity is often hampered by the presence of dominant species, such as certain predators, geese or exotic species. Landowners and land users need to consult with each other in order to develop a regional-specific strategy which provides solutions to these problems. Nature conservation is not always optimally arranged to preserve the maximum biodiversity that is characteristic of the landscape. Improving the way in which we structure, connect and manage nature areas in the Netherlands could boost biodiversity.

The main objective for the nature reserves route is:  
**To restore and optimally manage the local, habitat-specific biodiversity in Dutch nature reserves.**



In order to achieve this objective, we need to work together on the following ambitions:

- By 2022, nature-oriented laws and regulations will lead to an annual alleviation of the environmental constraints of biodiversity (nitrogen deposition, groundwater levels, pesticides).
- By 2021, a Biodiversity Monitor will have been developed to assess the performance (using KPIs) of nature reserve managers.
- By making the countryside more attractive to plants and animals as well as through regional-specific collaboration, nature reserves will be effectively connected by 2030.
- By 2025, 75% of the nature reserves will be part of landscape-specific collaborations, in which agreements have been made with farmers and other land users about measures to strengthen biodiversity in and around the nature reserve.

The Core Group will make the following contributions to the above ambitions and call on other stakeholders to do the same:

- In 2019, 25 administrative units of the Dutch Society for Nature Conservation (Natuurmonumenten) will start performing farm scans, in which they will actively work with farmers to seek initiatives and opportunities in order to put the objectives of the Delta Plan into practice.
- In 2019, the Dutch Society for Nature Conservation in Midden-Delfland will explore how to put into practice the agricultural vision of the Minister of Agriculture, Nature and Food Quality and the objectives of the Delta Plan.
- In 2019, NERN will encourage its members to participate actively in regional collaborations.
- In 2020, Naturalis will play an active role as a knowledge broker in four regional processes.
- In 2021, the provincial Nature and Environment Federations (Natuur- en Milieufederaties) will initiate, facilitate or support landscape-specific processes within at least ten provinces in which public authorities, farmers and land management organizations are collaborating to achieve the goals of the Delta Plan.

## Agriculture route

One of the reasons why biodiversity is under pressure is because of the way our food system has developed. As the largest land user, agriculture can make a significant contribution to biodiversity recovery. This requires that biodiversity management can successfully be integrated in farm operations, and that these efforts are adequately appreciated and awarded. Alignment with other sustainability themes such as the climate, environment and landscape are also important.

The main objective for the agriculture route is:

**To ensure that sustainable plant and animal production systems have future prospects, are circular and are based on healthy soils in biodiverse landscapes.**

In order to achieve this objective, we have formulated the following sub-goals.

- Increased integration of **functional agricultural biodiversity** through:
  - A healthy, resilient soil as the basis for business operations.
  - Increased reliance on wild pollinators and natural pest control, to contribute to more sustainable cultivation and healthy products.
- The agricultural sector is one of the nature management organizations in the Netherlands and produces **favorable biotopes** for wild plants and animals.
- Farmers ensure maximum circularity of nutrients and biomass **on a regional scale**.

We are convinced that systemic change is necessary in order to achieve these goals, which means that the costs and benefits of biodiversity must be internalized.





At the same time, farmers who make efforts to promote biodiversity must be encouraged and rewarded. To this end, we have formulated the following interrelated ambitions:

- **By 2020, in addition to the Biodiversity Monitor for Dairy Farming, a Biodiversity Monitor for Arable Farming will be ready for use.**
- **From 2020 onwards, at least 80% of the Dutch public knows that farmers can make a significant contribution to biodiversity recovery and wants to contribute to realizing this potential in their role as consumers and citizens.**
- **From 2020 onwards, relevant laws and regulations will support farmers who contribute to the recovery of biodiversity, whereas contradictory legislation in the area of nature, climate and the environment will have been eradicated by 2022.**
- **From 2021 onwards, an initial toolbox will be available with measures based on scientific economic and environmental evidence to restore and strengthen biodiversity; these measures will be actively used, including in education.**
- **From 2021 onwards, the business model of farmers contributing to biodiversity improvement has a competitive advantage in the market. This business model will be based on complementary rewards from stakeholders such as consumers, public authorities and banks, based on the generation of public services such as biodiversity improvement and the mitigation of climate change.**
- **From 2022 onwards, 60% of farmers will work with other land users and landowners towards biodiversity objectives at the regional level.**

As a first step, the Core Group will make the following contributions to these ambitions and call on other stakeholders to do the same so tangible results can be achieved:

- In 2019, agricultural collectives and the Dutch Organization for Agriculture and Horticulture will launch seven CAP pilots to develop proposals which effectively flesh out and implement eco-regulations in Pillar 1 and potentially Pillar 2 of the new Common Agricultural Policy 2020–2027.
- From 2019 onwards, Agrifirm will develop specific products and services based on market demand and developments to promote the implementation of measures which accelerate the recovery of biodiversity in the dairy and arable farming sectors.



- From 2019 onwards, the Dutch Food Retail Association (Centraal Bureau Levensmiddelenhandel, CBL) will encourage its members to contribute to a better position for farmers and growers who can show their performance regarding the recovery of biodiversity.
- From 2019 onwards, Dutch supermarkets will make efforts to give biodiversity a more prominent place through quality labels, standards and certifications.
- From 2019 onwards, the provincial Nature and Environment Federations will contribute to developing new business models for nature and agriculture by setting up six provincial carbon banks and supporting three provincial land banks.
- From 2019 onwards, the Netherlands Institute of Ecology (NIOO-KNAW) and Wageningen University & Research (WUR) will use their collaboration in the Centre for Soil Ecology to supply fundamental and applied knowledge about the living, resilient soil as well as biomass/nutrient cycles. From 2019 onwards, they will also work closely with other stakeholders in the proposed living labs.
- From 2020 onwards, the Biodiversity Monitor will be usable by dairy companies to measure results in the area of biodiversity, provide dairy farmers with insight into their impact and encourage them to make a net positive impact on biodiversity.
- From 2021 onwards, Rabobank will reward farmers via a public-private partnership for their biodiversity performance through a reduction in interest rates on new and existing loans as measured using the Biodiversity Monitor.
- By 2021, WWF-NL will have found at least five stakeholders willing to recognize and reward farmers for their biodiversity performance as measured using the Biodiversity Monitor.
- By 2021, the Dutch Society for Nature Conservation will have adjusted its land lease rules, so the promotion of biodiversity is even more firmly enshrined as a principle in all new contracts that it signs.
- By 2021, Rabobank will have fully integrated biodiversity performance into the risk management assessments of the dairy and arable farming sectors.



## Public spaces route

The design and management of new and existing infrastructure, business parks, water management and other public spaces are currently not making a sufficient contribution to biodiversity. That situation must change, because public spaces are badly needed for the recovery of biodiversity: green areas must stay green and grey areas must become greener. After agriculture, public spaces are the largest land user in the Netherlands. As a result, public spaces provide huge opportunities for the recovery of biodiversity. Given the numerous actors and interests in public spaces, an integrated approach involving all sustainability themes (biodiversity, climate, energy, mobility and landscape) is essential. Many of the stakeholders involved, e.g. in the Green Deal Infra Nature, already recognize the importance of biodiversity and the role that nature systems can play in solutions for spatial planning.

The scope of the public spaces route is twofold. We are focusing on:

- Public spaces outside cities (e.g. infrastructure, bodies of water and waterways, energy pathways, business parks, spatial planning for recreation, housing construction and enterprise policy in rural areas).
- All stakeholders which have an interest in livable public spaces and which can help to bring about biodiversity recovery by recognizing, facilitating and rewarding efforts; these stakeholders include contractors and construction companies, financial institutions (banks, insurers), public authorities (including provincial and municipal authorities, water boards and the Directorate-General for Public Works and Water Management (Rijkswaterstaat), energy companies (gas and electricity companies), managers (of roads, business parks, dikes and municipal green areas); social organizations and citizens.

The main objective for the public spaces route is:

**To make biodiversity and regional identity in public spaces core objectives for the management of land by government and semi-government bodies as well as private stakeholders, in addition to safety and attractiveness. As a result, the expansion of built-up areas and infrastructure is realized in such a way that it creates greater biodiversity at a local level than was present before the construction and that it has a positive effect on nature in the surrounding landscapes.**

In order to achieve this objective, we have formulated the following sub-goals.

- **Greening of infrastructure**, in which:
  - All projects leave behind more biodiversity than they found
  - 'Infra nature' is comprehensively incorporated from tendering to implementation
  - Active collaboration is sought between road authorities, farmers and nature managers to improve the effectiveness of efforts.
- **Making construction and development projects nature-inclusive**, meaning that:
  - Work is done to find natural solutions to technical problems
  - Projects contribute to local biodiversity and a healthy living environment.
- **Improving biodiversity through the management of water and waterways**, as a result of which:
  - Water management contributes to economic, environmental and social goals for the area
  - Active collaboration is sought between water authorities, farmers and nature managers to improve the effectiveness of efforts.
- **Comprehensively incorporating greater biodiversity** as a goal in projects concerning climate adaptation, housing construction, infrastructure and energy transition
- **Exploring biodiversity as part of the solution** in all projects in public spaces.



In order to achieve these objectives, we need to work together towards the following ambitions:

- **From 2019 onwards, investments to improve biodiversity in public spaces will be given priority in the awarding of tenders and projects.**
- **By 2020, a Biodiversity Monitor will have been developed for the different types of public spaces, such as dikes and road structures.**
- **From 2020 onwards, an initial toolbox of economic and environmental knowledge about improving biodiversity in public spaces will be freely available; this knowledge will be actively used by the stakeholders in the Green Deal Infra Nature coalition and others, while it will also be integrated into relevant education and training programs.**
- **From 2021 onwards, all stakeholders involved with projects in public spaces will be proud of their contributions to strengthen and restore biodiversity in the Netherlands, with the motto of 'leave behind more biodiversity than you found' as their indicator for success.**
- **By 2021, the biodiversity objectives for all projects in public spaces will be determined together with other regional land users and landowners.**
- **From 2022 onwards, relevant laws and regulations will provide encouragement to the managers of public spaces who are contributing to the recovery of biodiversity, whereas contradictory legislation in the area of nature, climate and the environment will have been eradicated.**

The Core Group will make the following contributions to these ambitions and call on other stakeholders to do the same:

- From 2019 onwards, Naturalis will initiate a knowledge portal and toolbox for improving biodiversity in public spaces, together with the knowledge coalition.
- As the initiator of the 'infra nature' concept, the Butterfly Foundation (Vlinderstichting) will launch a steering group to protect the interests and objectives of infra nature and the Delta Plan.
- In 2019, the Butterfly Foundation will develop a quality label for verge management.
- From 2019 onwards, Naturalis, the Netherlands Institute of Ecology and other NERN researchers will use education and citizen science in order to motivate the public to make their own local areas more biodiverse.
- From 2019 onwards, Naturalis and the Butterfly Foundation will investigate the impact on biodiversity in solar and wind farms.
- Farmers can contribute to the management and maintenance of public green spaces, resulting in closed regional cycles. From 2019 onwards, the Dutch Organization for Agriculture and Horticulture and Farmers&Nature will actively encourage and support farmers, as well as call on road authorities to make agreements about biodiversity with individual businesses or groups of businesses.
- In 2019, WWF-NL will work with partners to co-develop a climate adaptation strategy for the large water bodies in the Netherlands, that will result in a safe country, with sufficient amounts of fresh water and increased biodiversity.

## Monitoring results

The monitoring program to be set up must be feasible in practice and must build on the strengths of existing monitoring programs. This new monitoring program will comprise two elements: biodiversity indicators and KPIs for land users. In addition, indicators can be used which are relevant not only in administrative or environmental terms but also for policy reports (e.g. the Birds and Habitats Directives or the Convention on Biological Diversity).

We hope to achieve this aim through the following objectives:

1. **Recalibrating the current biodiversity and performance indicators** as well as making proposals for new and supplementary indicators to measure the state of and trends in biodiversity, make performance visible (KPIs), provide insights into causes and offer frameworks for action to land users, policymakers and the public.
2. **Identifying gaps** in current methods of data collecting (e.g. monitoring networks or data collection through RVO.nl) and making proposals to improve data collection (including integrating sources such as satellite data, genetic monitoring and big data solutions).
3. **Improving cohesion** between indicators at the national level, landscape level and land user level to improve the effectiveness of measures contributing to the recovery of biodiversity.
4. **Safeguarding effectiveness, continuity and cohesion** through monitoring indicators and integrating the 'learning by doing' approach with the aid of a governance structure.

In order to achieve these objectives, we need to work together towards the following ambitions:

- **By 2020, the monitoring system for the Delta Plan will have been implemented.**
- **By 2020, the biodiversity indicators and KPIs for agriculture, public spaces and nature reserves will have been established.**
- **Evaluations in the context of the 'learning by doing' component of the monitoring system will have been conducted by the end of 2020.**



The Core Group will make the following contributions to the success factors and call on other stakeholders to do the same:

- From 2019 onwards, Farmers&Nature and the agricultural collectives will work with players in the dairy chain to develop a national system in which the knowledge and working methods of the collectives and the national Agricultural, Nature and Landscape Management System (SCAN-ICT) can be used to establish and monitor measures taken by dairy farmers who are promoting biodiversity. In the future, Farmers&Nature and the agricultural collectives would also like to develop this system for and with arable farming as well as other agricultural sectors.
- From 2019 onwards, Agrifirm will actively support the development and practical implementation of the Biodiversity Monitors for Dairy and Arable Farming, in keeping with its current support for the implementation of the Annual Nutrient Cycling Assessment (KringloopWijzer).
- From 2019 onwards, NERN will encourage all affiliated knowledge institutions and universities to include the recovery of biodiversity in research as well as education and visibly link this activity to the Delta Plan. NERN members will be encouraged to participate actively in the implementation of the Delta Plan.
- From 2019 onwards, NERN researchers will promote knowledge sharing by seeking connections between academic and professional higher education programs, as well as with secondary vocational education programs, in accordance with the outlines of the Green Deal 'Nature-Inclusive Agricultural Education'.
- From 2019 onwards, Naturalis and other scientific organizations will contribute to a more comprehensive and accessible biodiversity data infrastructure for the Netherlands.

- From 2019 onwards, Naturalis will use its biodiversity knowledge to substantiate and develop the desired monitoring techniques and KPIs, including modern methods based on biodiversity IT systems and genetic biomonitoring.
- The dairy sector is committed to the continued development of the Biodiversity Monitor instrument from 2020 onwards, so dairy farmers can start applying it.
- From 2020 onwards, the Biodiversity Monitor will be used by Skylark Foundation participants to measure results in the area of biodiversity, provide arable farmers with insight into their impact and encourage them to make a net impact on biodiversity. In 2021, the Skylark Foundation and the Dutch Organization for Agriculture and Horticulture will actively share knowledge and experience through the Biodiversity Monitor as well as encourage the use of the Biodiversity Monitor by its members to measure results in the area of biodiversity, provide arable farmers with insight into their impact and encourage them to make a net impact on biodiversity.
- From 2020 onwards, the Skylark Foundation will contribute to a better understanding of biodiversity performance and improvement opportunities among 75% of affiliated arable farmers through knowledge development as well as the development of monitoring and a dashboard.
- By 2021, Rabobank, WWF-NL and other stakeholders will have developed the Biodiversity Monitors for arable farming and dairy farming to measure biodiversity performance in terms of closing nutrient cycles, strengthening functional agricultural biodiversity and creating favorable habitats for wild plants and animals.







## Regional landscape approach as a starting point

Plants and animals have a bright future if our regional landscapes meet all preconditions for biodiversity to be strengthened on all levels. For this purpose, a strong commitment to an integrated approach at the regional level is important, in addition to the management actions that farmers, government bodies, individuals, nature conservation organizations and other land users can take individually. Moreover, nearly all landscapes in our densely populated country are expected to support multiple functions at the same time, such as living, working, nature, and mobility. This requires genuine cooperation from all stakeholders in a landscape, including public authorities, companies, agriculture, infrastructure and citizens.

To increase the chances of success, it is very important that we take into account the needs and desires of the various stakehol-

ders (i.e. the success factors), as well as the opportunities to improve biodiversity in the specific region or landscape. Municipal and provincial authorities, farmers – individually and in cooperatives or associations – and companies in the food and agriculture chain can all take on a role as catalysts to accelerate these processes. Increasingly, citizens' initiatives are also playing such a role. Various local and provincial governments have already included biodiversity as well as nature's capital in their visions for climate adaption and the environment. We hope to strengthen this movement as a component of this Delta Plan.

The integrated approach at the regional landscape level plays a key role throughout the Delta Plan, both in local food initiatives and in the living labs for monitoring. For this reason, the goals, initiatives and

contributions towards this aspect can be found among the other success factors.

The Core Group will make the following contributions to the landscape-specific approach and call on other stakeholders to do the same:

- From 2019 onwards, the agricultural collectives allied under the Farmers&Nature umbrella will offer to act as facilitators for making agreements with landowners (public authorities, individuals, land management organizations, suppliers and buyers) for a regional-specific approach to the recovery and strengthening of biodiversity.
- In 2021, the provincial Nature and Environment Federations will facilitate and/or support a Nature-Inclusive Agriculture Living Lab in nearly every province within the Netherlands.

- From 2019 onwards, the provincial Nature and Environment Federations will serve the interests of biodiversity by setting themselves the task of raising awareness among a wide audience and translating it into specific, easily-accessible public actions such as 'Operatie Steenbreek', 'Eetbare steden' and 'Groene lopers' in ten provinces as well as a nationwide food campaign.
- The Dutch Organization for Agriculture and Horticulture will encourage, facilitate and provide direction to regional processes and projects in which farmers collaborate with public authorities, nature conservation organizations as well as food chain organizations. Recovery of biodiversity will be given increased emphasis in all ongoing processes, such as the Delta Plan for Agricultural Water Management.





## How do we want to organize this change? Towards a new governance structure

Biodiversity recovery in the Netherlands requires systemic change, in which the costs and values of biodiversity are internalized so we can tackle the challenge together in a cohesive manner. The successful implementation of such complex change, with so many different stakeholders and interests, requires a completely new type of governance structure. Existing mindsets will be opened to debate, innovative leadership will be developed and collaboration promoted.

We can connect the various sustainability themes by using an integrated approach. A fundamentally different approach and strategy will be required from public authorities as well. We invite the government to explore these elements with us in depth and to use an interdepartmental

approach to do so. This process will also help provincial and municipal authorities to improve the alignment of their integrated sustainability efforts, including the recovery of biodiversity. An extremely important aspect is achieving greater cohesion in laws and regulations. Only then can we derive the greatest gains from our collective efforts.

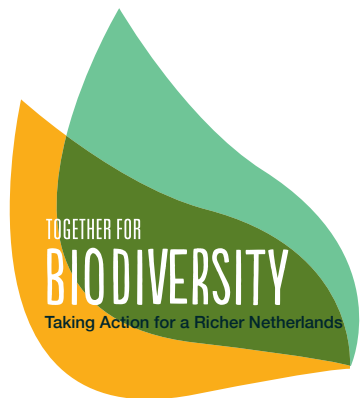
In the Netherlands, we have little experience with governance models which promote systemic change and which advocate an integrated approach. They involve a process of gaining trust, working together and learning by doing (the 'learning by doing' approach). The emphasis is on 'encouraging and looking forward' rather than 'controlling and looking back'.

This situation requires a governance structure in which we all have ownership, without the gridlocks that often result from shared responsibilities. Public authorities, land users, landowners, social organizations, researchers and business communities play an equal and important role in this new governance structure. Over the next few months and in close consultation with public authorities, the Core Group will shape a suitable governance structure as well as the associated financing.

Biodiversity in the Netherlands will not restore itself; we need to work together and make clear agreements. This document provides direction and creates a framework, which are widely shared by all Core Group members.

It is the first step in a movement that will lead to the sustainable recovery of biodiversity in the Netherlands. The document is also a handbook for everyone who would like to be involved. Over the next few months, we will actively approach stakeholders that could play an important role in the Delta Plan so as to generate specific contributions which will collectively put biodiversity in the Netherlands on the road to recovery and help us achieve our vision for 2030.





### Core Group

Agrifirm  
BoerenNatuur (Farmers&Nature)  
Centraal Bureau Levensmiddelenhandel (Dutch Food Retail Association)  
Duurzame Zuivelketen (Sustainable Dairy Chain)  
LTO Nederland (Dutch Organization for Agriculture and Horticulture)  
Naturalis Biodiversity Center  
Natuur en Milieu Federaties (Nature and Environment Federations)  
Natuurmonumenten (Dutch Society for Nature Conservation)  
Netherlands Ecological Research Network (NERN)  
Rabobank  
Stichting Veldleeuwerik (Skylark Foundation)  
De Vlinderstichting (Dutch Butterfly Conservation)  
WWF NL (World Wide Fund for nature)

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*Taking Action for a  
Richer Netherlands*

