

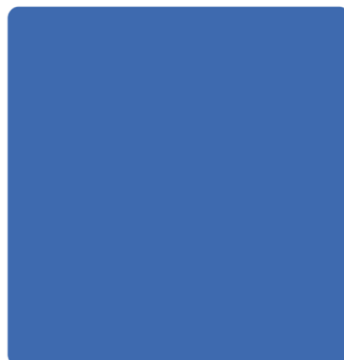
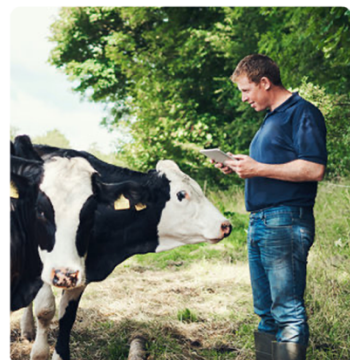
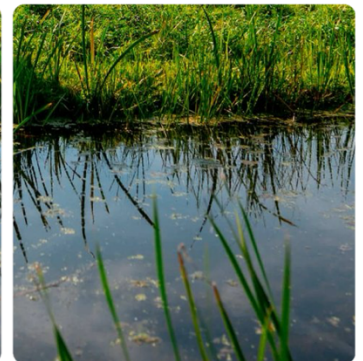
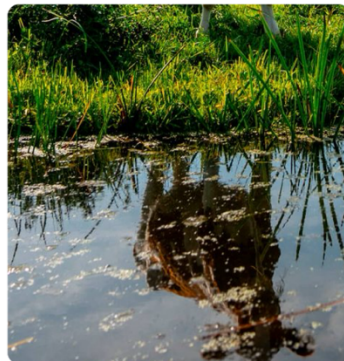
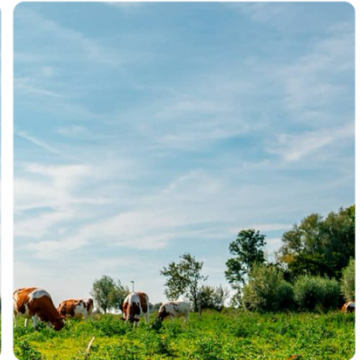


Groenfonds Midden-Delfland

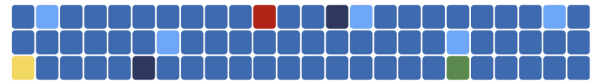
A developer obligation-based investment fund to pay farmers for delivering green services

CLIMATEFIT International best practice factsheet

Case ID: 06



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Summary

Groenfonds Midden-Delfland, initiated in 2005 by three municipalities, represents a pioneering financial and business model aimed at preserving the agricultural landscape of the Midden-Delfland green area. This model harnesses developer obligations from real estate projects as a source of funding. Incoming developer obligations are defensively invested by an asset manager. The returns on capital from those investments are used to compensate dairy farmers for executing a range of green services, a form of results-based financing. These services include, but are not limited to, meadow bird management, maintenance of historic grasslands, and upkeep of landscape elements like fruit and pollard trees. An innovative aspect of this model is its reliance on defensive investments of developer contributions, ensuring a sustainable, steadily increasing, and long-term financial flow.

The success of Groenfonds Midden-Delfland is evident in its ability to provide a steady income for participating farmers, thus contributing to the maintenance of valuable landscape and ecological elements. This approach not only supports biodiversity but also strengthens the socio-economic link between urban and rural areas through educational and recreational initiatives. Groenfonds offers a replicable framework for other regions because of its flexibility, simplicity, and scalability. Transferability to other regions is contingent upon several conditions, including the presence of a shared interest among stakeholders, prospects for future development contributing to a reliable income stream, and the establishment of a governance structure that transcends political cycles. The adaptability of the model to incorporate new green services in response to evolving environmental and societal needs is crucial for its applicability in diverse contexts.

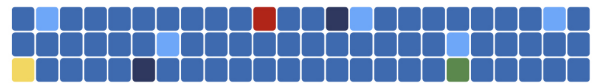
Keywords: Groenfonds, green services, agricultural landscape, results-based financing, developer contributions

Actors interviewed: Treasurer and secretary of Groenfonds Midden-Delfland

Cover photos: Midden-Delfland site (top photo); © Vockestaert (middle photo); © All4Biodiversity (bottom photo)

Further reading: [Website Groenfonds Midden-Delfland](#)

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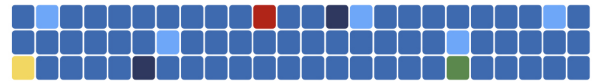


Best practice information card

Table 1. Groenfonds Midden-Delfland. Information card

Location	Midden-Delfland, Delft, and Schipluiden (The Netherlands)
Population size	NA
Project area size ¹	76 km ² (the entire Midden-Delfland green area, including agricultural land, nature areas, recreational zones, and water).
Area type	Agricultural land, peat meadows, polder
Climate challenge	Quality loss of valuable agricultural landscapes due to lack of maintenance of landscape and ecological elements
Key Community System(s)	Land use and food systems
Objectives	Maintaining the agricultural landscape, including agricultural heritage, valuable landscape and ecological elements, and strengthening the relationship between city and countryside through recreation and environmental education
Climate challenge solution	Paying dairy farmers to perform green services. Green services include meadow bird management, maintaining historic grasslands, maintaining landscape elements (fruit trees, pollard trees, small canals), and maintaining cultural historical buildings, among others. To reinforce the city-countryside relationship, green services also include opening up farms/companies for educative and recreational purposes.
Key benefits	Avoid deterioration of valuable landscapes. Recreational value for tourists and surrounding communities environmental and agricultural education leads to improved knowledge and awareness about landscape values Maintaining historic grasslands and having a larger variance of grasses makes them more climate resistant to heat, droughts, and flooding.
Implementation status & timeframe	Groenfonds was officially created in 2005 and has been under operation since 2006
Investment volume (€)	€250,000-€500,000 annually for green services
Key financing barriers addressed	Lack of structural and long-term public funding for green area management and maintenance. Green area maintenance is not a priority of dairy farmers, they lack resources for voluntary maintenance.
Financial model	Groenfonds collects financing from real estate (residential and industry) developments through developer obligations under the banner of nature compensations. Those developer obligations are defensively invested, and the return on capital from those investments are used to pay dairy farmers for delivering green services.
Financial sources	Public: local municipalities Private investors: project developers
Financial instruments	Land value capture: developer contributions General public budget Results-based financing: payment for ecosystem services (PES) Asset management (return on capital from defensive investments)

¹ We did not find an exact project area size in any documents or on web pages. We calculated the project area size by drawing a polygon on Google Maps that as best as possible copies the shape of the area as seen in Figure 1.



Overview and timeline

Green-blue areas in the **Netherlands** are important due to their multiple benefits, including landscape and ecological qualities, cultural heritage, and agriculture. **Long-term maintenance and financial support are required to safeguard and protect green area values, but structural finance often fails to provide this for various reasons.** Green services management in the countryside is a patchwork of public and private organisations and actors, with financing being rather project-based or incidental rather than structural and long-term. Local municipal budgets are increasingly constrained, leading local governments to seek financial support from the national government to maintain green areas. Green area management is also challenging in regions with significant spatial pressure and competition from residential areas, energy and transportation infrastructure, industry, and distribution, among others.

Midden-Delfland in the Dutch province of South Holland is a green area characterised by these valuable elements but faces financial challenges for long-term maintenance. Midden-Delfland is a green heart located between the highly urbanised areas of Rotterdam, Delft, and The Hague. It shares its name with the municipality Midden-Delfland, which is located there, but the boundaries of the green area are larger and encompass multiple municipalities (Figure 1) that are not the same as the municipality's boundaries. In 1977, Midden-Delfland was divided into different zones through the Reconstructiewet (reconstruction law), assigning clear functions and maintenance responsibilities to each area. Recreational, water, and nature areas were each assigned an organisation responsible for green area management and overseeing economic activities in their respective areas. Additionally, the dairy farming industry active in the area became responsible for maintaining valuable landscape elements in Midden-Delfland's agricultural areas. However, production costs for dairy farms in Midden-Delfland are high, including high land prices, while milk prices are low. Each year, the number of dairy farms in the Netherlands decreases. Since maintaining landscape elements is not a legal obligation for farmers and not part of a farmer's core business, it is not prioritised as an activity. Consequently, **many farmers do not have the resources to voluntarily maintain the valuable landscape in agricultural areas.**

In 2000, agreements were made between the municipalities of Delft, The Hague, and Schipluiden to solve the final piece of the puzzle and ensure the long-term maintenance of Midden-Delfland's agricultural lands. In 2004, the municipalities of Schipluiden and Maasland merged to become the municipality Midden-Delfland. **In 2005, Groenfond Midden-Delfland ('Green Fund Midden-Delfland') was created as a foundation and standalone entity** with two objectives: maintaining the agricultural landscape, including cultural heritage, valuable landscape, and ecological elements, and strengthening the relationship between city and countryside through recreation and education. Later, a fourth municipality, Maassluis, joined Groenfond. **Groenfond collects financing from real estate (residential and industrial) developments through developer obligations under the banner of nature compensations. These developer obligations are defensively invested, and the return on capital from those investments is used to pay dairy farmers for delivering green services.** Green services include meadow bird management, maintaining historic grasslands, maintaining landscape elements (fruit trees, pollard trees, small canals), and maintaining culturally significant historical buildings, among others. To reinforce the city-countryside relationship, green services also include opening farms/companies for educational and recreational purposes. The specific green services have changed throughout the years after audits conducted every six years (the last one in 2023). Farmers participate through contract periods of six years, after which they need to reapply to participate for another six years.

The foundation of Groenfond was accidental and the consequence of an opportunity rather than the outcome of a strategic planning process. In the early 2000s, many development plans were in the pipeline that either bordered the Midden-Delfland green area or would have taken up some of the green area. The municipalities of Delft and Midden-Delfland had residential and industrial building programmes, and The Hague held an official share or participation in developments in that area. Additionally, a new highway, the A4, was planned as a missing link between the A20 highway and the city of Rijswijk. The A4 would run straight through the green area. These municipalities politically agreed that compensation measures were required to maintain the values and qualities of the landscape, specifically in the form of developer contributions from those new developments that would flow into a fund. Later, the municipality of Maassluis was obligated to join Groenfond because of a residential development programme they proposed that was located near the green area of Midden-Delfland. Dairy farmers welcomed the initiative because the paid green services were an opportunity to have additional income. Participation is voluntary but has proven to be a successful incentive for farmers to participate.

Groenfond was not initiated in response to specific climate change challenges, nor is it the result of a climate policy plan. We selected this case for research because we believe that Groenfond is a funding and financing solution that can be applied to climate adaptation measures in response to climate change challenges. The interview respondents stated that the green services are updated before every six-year contract period. They said it's possible that in the future green services may include measures to enhance climate resilience. We'll see later that certain green services currently adopted already have this effect.

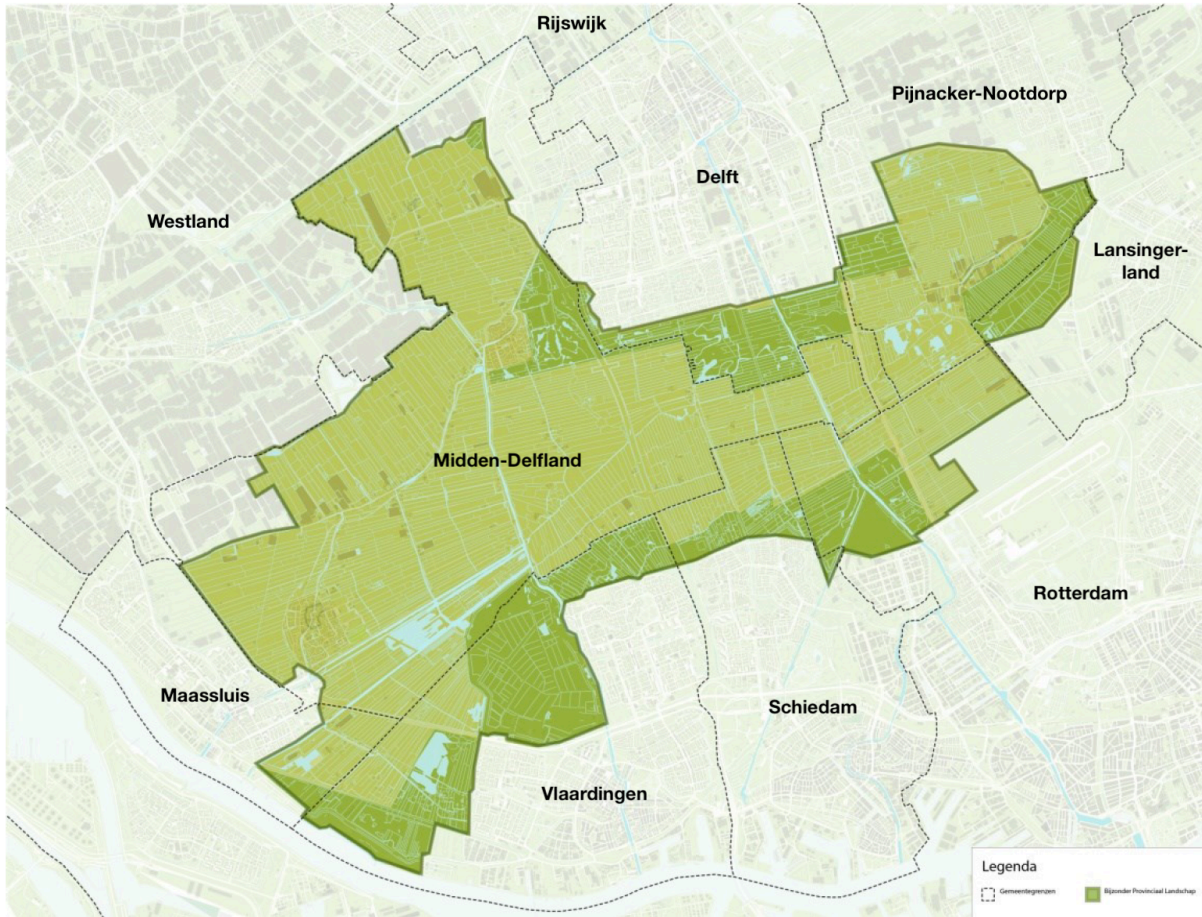
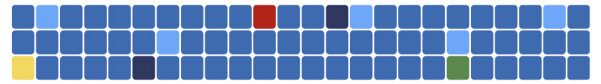


Figure 1. The green area Midden-Delfland (green coloured area) and surrounding municipalities. The dotted lines are the municipality borders. The light green colours of the green area are agricultural lands included in the contract period 2018-2023.²

Table 2. Groenfond Midden-Delfland. Timeline with key moments

Date	Key moment
2000	The municipalities Midden-Delfland and Delft sign a covenant that will later result in the foundation of Groenfond Midden-Delfland. They are swiftly joined by The Hague.
2003	The municipalities Midden-Delfland, Delft, and The Hague tasked Vockestaert and LTO Delflands Groen to develop a reward system for green services delivered by dairy farmers.
2005	The Foundation Groenfond Midden-Delfland is officially founded at the initiative of the municipalities Midden-Delfland, Delft, and The Hague
2006	Groenfond Midden-Delfland receives approval from the European Commission to pay farmers for delivering green services through the fund
2006-2011	First six-year contract period in which farmers can participate
2015	The municipality Maassluis joins Groenfond Midden-Delfland. They are obligated to do so because their proposed residential development programme is located near the Midden-Delfland green area.
2012-2017	Second six-year contract period in which farmers can participate
2018-2023	Third six-year contract period in which farmers can participate
2024-2029	Fourth six-year contract period in which farmers can participate

² Vockestaert. (nd). *Groenfond Midden-Delfland 2024-2029*. Vockestaert. Last consulted on 22 March 2024. [URL](#)

Governance and key stakeholders

Groenfonds Midden-Delfland is a foundation listed at the Dutch Commerce Chamber as a non-profit public benefit institution. At the Dutch tax administration, Groenfonds is labeled as a charitable organization. The foundation has a statutory objective, meaning that its objectives are officiated in the organization's statutes. A foundation of this type needs a board of at least three members. The Groenfonds board has one member from each participating municipality, totaling four board members since Maassluis joined Groenfonds in 2015. Board members are municipality aldermen, meaning that the composition of the board can change every time local elections take place. The board is mandated to make decisions. The board receives support to execute daily tasks from two officials employed at the municipality of Midden-Delfland, to avoid putting the financial burden of their salaries on the foundation. The four municipalities share the cost of these two officials, who take the roles of treasurer and secretary.

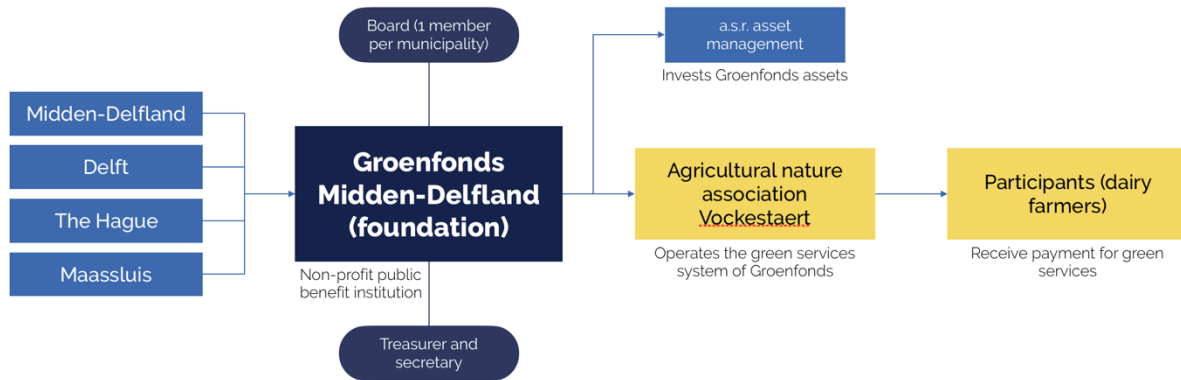


Figure 2. Organisational structure of Groenfonds Midden-Delfland (source: author).

The actual setting up and execution of the payment system for green services is subcontracted to the agricultural nature association Vockestaert. Founded in 1999 by farmers in the Midden-Delfland area, Vockestaert aims to maintain the characteristic open polder landscape of the area. Vockestaert acts as an important intermediary between the Groenfonds (and therefore the municipalities) and the dairy farmers. Tasked with developing the green service rewarding and payment system in 2003, Vockestaert continues to operate it today. Executing this system involves coordinating calls for new contracts at the start of each six-year contract period, evaluating dairy farmers' applications, screening farmers, arranging payments for green services, and performing monitoring and evaluation. The governance structure ensures that each party performs tasks closely aligned with their expertise. The municipalities are responsible for getting the financial resources into the fund, while Vockestaert, with its experience in maintaining and managing agricultural areas, enjoys the confidence and trust of the farmers in Midden-Delfland.

A Dutch asset manager, a.s.r. asset management, is responsible for managing the Groenfonds' resources from developer obligations. More details are provided in the business and financial model section.

The dairy farmers can participate through six-year contracts. At the start of each contract, the farmers must complete an application form indicating which landscape or cultural historical elements or structures are present on their lands that they will maintain in accordance with prescribed measures. Additionally, they must indicate which activities they are interested in hosting to strengthen the relations between city and countryside (e.g., a set compensation per group, such as a school, that they host at their farm). Formerly referred to as a 'point system', where each achieved point equalled financial compensation, it is now termed more generally as "green services". Vockestaert evaluates the applications and performs a site visit screening for new applicants. During a site visit, Vockestaert checks if all indicated elements are present and if they are of significant landscape and cultural historical value.

At the end of each six-year period, an audit is performed by a third party, which includes several site visits to participating farmers to ensure they maintain their indicated elements in alignment with the prescribed measures.

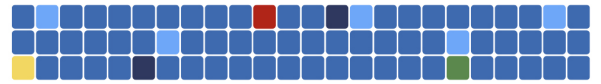


Table 3. Groenfonds Midden-Delfland. Key stakeholders and their responsibilities or roles

Stakeholder	Type	Role and responsibilities
Midden-Delfland	Public (municipality)	Initiator and current member of the board of Groenfonds Midden-Delfland
Delft	Public (municipality)	Responsible for collecting developer obligations for the fund from residential and industrial development projects
The Hague	Public (municipality)	
Maassluis	Public (municipality)	
Vockestaert	NGO	Agricultural nature association in the green area Midden-Delfland. Responsible for executing the green services system of Groenfonds.
Dairy Farmers Midden-Delfland	Private	Participants of the green services system of Groenfonds. In case of participation, they are responsible for maintaining landscape and cultural historical elements in accordance with prescribed measures.
a.s.r. asset management	Private (asset manager)	Dutch asset manager responsible for managing the funds' resources and for defensive investments of the resources.
Project developers	Private	Project developers pay a contribution for each development in pre-defined zones near Midden-Delfland. Aside from this developer obligation, they do not have an active involvement in Groenfonds.

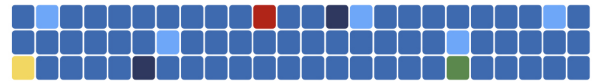
Business model & financial model

Business model

The business model principle of Groenfonds is that **new developments near the Midden-Delfland green area should pay a compensation that can be used to pay farmers to maintain the agricultural and cultural landscape** and safeguard its natural, cultural, landscape, and historical values. Groenfonds facilitates a structural financing stream for green services that allows for long-term maintenance and management of green areas on agricultural lands, differing from the dominant ad hoc, one-off, and fragmented financing of green and blue areas in the Netherlands. Through this business model and the green services that farmers can receive payment for, multiple values are created:

- Maintaining physical landscape elements such as fruit or pollard trees helps to preserve ecological values of the area, including biodiversity and certain species.
- Many landscape elements, along with historic sites and buildings, offer cultural or historical value that attract tourists and visitors from the surrounding urban areas, thereby creating more attention for local dairy farms.
- Farms that open their dairy farms to the general public create social values by educating people about food production.
- Maintaining historic grasslands is one of the most prominent green services. A larger variance of grasses makes them more climate-resilient to heat, droughts, and flooding. The grasslands also serve an important purpose of capturing CO₂ emissions.

The **key beneficiaries of Groenfonds are the municipalities and the farmers**. As will be further explained in the next section, Groenfonds' financial model does not rely on traditional direct investments from public bodies in green area maintenance, which is a win-win for the municipalities and the participating farmers. Public authorities do not need to invest public budget and shift the financial responsibility to developer obligations from new developments, at the same time offering compensation for possible development impacts on the green area. Farmers can voluntarily decide to participate and receive additional income for green services. In 2017, farmers on average received €4,000 (2024 Euro) per year for delivering green services. Indirect beneficiaries are the surrounding communities who can access recreational facilities in the area. In turn, economic actors that offer recreational activities in the area benefit because the long-term maintenance ensures a good appearance, which attracts visitors.



Groenfonds Midden-Delfland did not require many additional resources beyond those that were already available among the different actors. Farmers receive compensation for using their own company resources (e.g., work tools, materials...). The four participating municipalities only need to co-finance two staff members (treasurer and secretary). By using the experience of Vockestaert as an agricultural nature association, operations are more cost-efficient. Vockestaert is paid for their services from Groenfonds' funds.

Financial model

Compensating the impact of new developments on nearby green areas through green services in this case required a financial model that channels financial resources of those responsible for the impacts to those that deliver green services to maintain the agricultural landscapes.

The **financing and funding structure** of Groenfonds is composed of four parts, as seen in Figure 3. The first part is a **one-time financial contribution from the participating municipalities** at the start of Groenfonds to establish a starting budget. Maassluis had to pay a one-time contribution when it joined Groenfonds in 2015. The second and largest part are the **continuous contributions from residential and industrial developments (developer obligations)**. An amount is paid per square metre for each new development.³ These amounts are determined in advance, so developers have transparency about their contributions. The municipalities have agreed which areas are eligible for which types of developments that must contribute to the fund, meaning that Groenfonds can anticipate the sum of developer contributions it can expect to receive in the coming years. The municipalities are currently near the end of these identified developments and could possibly identify new development areas in the future that must contribute to Groenfonds. **The initial municipal contributions and the developer contributions that flow into the fund are defensively invested by a.s.r. asset manager**, which is part three of the financial model. **The return on capital (interest rates) from those investments is used to pay participating dairy farmers for delivering green services**, and administrative costs of Groenfonds, which is the fourth part of the model.

The financial compensation offered to dairy farmers for delivering green services is a form of **results-based financing**, which means finance is provided purely or partly based on the achievement of particular outcomes and targets. The expected results are included in a contract for delivery of works, and payment is made once evidence is provided that such works have achieved the outcomes. Although it is not named as such, Groenfonds can be interpreted as a form of payment for ecosystem services (PES) because "PES involves payments to the managers of land or other natural resources in exchange for the provision of specified ecosystem services. Payments are made by the beneficiaries of the services in question." In some forms of PES, "national or local governments pay on behalf of their citizens, who are indirect beneficiaries," as is the case in Groenfonds, whereby the local governments pay dairy farmers via Groenfonds.



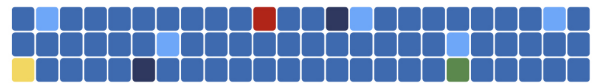
Figure 3. Financing and funding structure of Groenfonds Midden-Delfland.⁴

At the start of Groenfonds, it was written in the statutes of the foundation that only the return on capital from the defensive investments can be used to reimburse green services. Income from developer obligations may only be used to pay for green services if the investment profits are insufficient. This way, the fund steadily grew to have an asset value of €15.65 million (2024 Euro) by 2021. The long-term goal of Groenfonds is to pay for green services solely from defensive investment profits. Currently, about 50%-60% of the contracted green services delivered by dairy farmers are paid from investment returns, while the other 40%-50% are paid directly by developer contributions. Each year, the total income from investment returns and developer obligations exceeds the expenses (i.e., the payments to dairy farmers). This has allowed the fund to gradually grow and become independent of developer contributions.

a.s.r. asset management provides advice to Groenfonds about investment strategies in an asset liability study. The current investment portfolio is composed of shares, funds, ETFs (exchange-traded funds), state bonds,

³ We did not obtain information about the exact amount or how the amount is calculated. The annual reports mention the projects and the amount paid for them to the fund by developers, but there is no information about the project size.

⁴ Adapted from Verheul, W.J., Lammers, I., Verdaas, C., Verwayen, A. (2022). *Groenblauw doet allen goed. Maar de bekostiging kan beter*. Gebiedsontwikkeling.nu. Last consulted on 22 March 2024. [URL](#)



and real estate. There is some flexibility in the investment strategy, but it is mainly defensive because investments are made with public money.

Groenfonds' income sources and the green services payment system are flexible. Other municipalities could join in the future and pay contributions from new developments. Arrangements could also be made to receive contributions for other development types than residential and industrial development, but this is not yet the case. The green services for which farmers can receive payments can be adjusted before the start of a new six-year contract period, which has happened a couple of times. A recent audit from 2023 gives suggestions on how the green services could be updated to reflect current trends. For example, new subsidy mechanisms were initiated by national government bodies for which many dairy farmers in Midden-Delfland are eligible. The audit suggests that green services that are eligible for the new subsidies could be removed from Groenfonds' green services, so that the available budget from reallocating these green services becomes available to adjust the compensations for the remaining green services for inflation, or to add new green services. Although the green services today do not explicitly focus on enhancing climate resilience, the interview respondents mentioned that they keep track of new developments. At the start of future contract periods, it may be that green services are updated to target climate adaptation or resilience measures.

Enabling conditions

An important **resource** was the local knowledge and expertise of Vockestaert, which allowed the municipalities to create the green services payment system in partnership with an institution that was once founded by local dairy farmers. This saved time and effort for the municipalities to build that knowledge themselves.

Groenfonds is a non-profit public benefit institution, which is a common entity form in the Netherlands that did not require **legal changes**. This form was allowed under existing legislation, including the fund financing and how the fund is managed. Groenfonds did require approval from the European Commission to use financial resources brought in by municipalities from their budget and developments to pay private parties, in this case dairy farmers. The European Commission granted an exception to Groenfonds, but Groenfonds remains accountable to the European Commission to avoid unauthorised income support for private parties with public means.

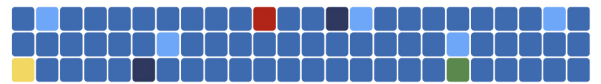
Farmers sign six-year contracts with Vockestaert in which they choose the green services (and their amount) that they want to deliver. The fees for the green services are fixed, which offers farmers certainty about the income from the programme for a period of at least six years. At the same time, when the contract ends, farmers have the freedom to decide whether they want to reapply for the programme.

Outcomes

The most recent **annual report of 2021** gives an indication of the size of the programme. In 2021, Groenfonds had a total income of €628,000 (2024 Euro), of which 64% were incomes from developer obligations and 35% were incomes from defensive investments (i.e., returns). The total expenses were €420,000 (2024 Euro), of which 63% were payments for landscape-related green services, 26% were subsidies for city-countryside relationship activities, and the remaining 11% were administrative and investment management costs. In 2021, Groenfonds' funds had a total value of €15.65 million (2024 Euro), which includes their defensive investment portfolio. Participating farmers could receive a maximum total annual payment of €5,000.

The **audit report of 2023** gives insights into the overall programme performance between 2018 and 2023. During the 2018–2023 contract period, 85 dairy farmers participated in the programme, compared to 70 and 76 dairy farmers during the 2012–2017 and 2006–2011 contract periods respectively. The 85 participants' green services ensure the maintenance of 766 hectares of historic grassland, 4,888 trees, and 266 cultural historical elements. Most of the payments made between 2018 and 2023 were allocated to nature and biodiversity green services (45% of the annual budget), predominantly the maintenance of historic grasslands, followed by landscape elements in second place (30%) and cultural historical elements in third place (20%). These numbers are not surprising considering green services for nature and biodiversity encompass larger surfaces in the area. On average, €230,000–€245,000 of the fund was allocated to green services (excluding subsidies for city-countryside relationship activities).

Although the contracted number of historical grasslands decreased since 2006, they are increasingly important for future landscape resilience from the perspective of climate mitigation and climate adaptation. In terms of **climate impacts**, the audit found that the larger variance of grasses makes them more climate resistant to heat, droughts, and flooding. During the extreme droughts of the summer of 2022, the grasslands remained fairly green. The grasslands also serve an important purpose of capturing CO₂ emissions.



Lessons learned

Successes and limitations

Groenfonds has facilitated the maintenance of landscape and cultural historical elements on agricultural lands in Midden-Delfland for almost twenty years. When it was formed, it was the first operative fund for landscape and green management. There are **three main success factors**:

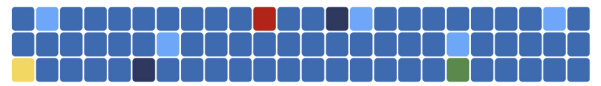
- **Support from farmers:** The figures in the latest audit (2023) show that participant numbers have remained stable and even increased for the 2018-2023 contract period. In both early (2007) and later audits (2017), participants were satisfied with the system. Individual prices are rather low, but taken together for multiple green services, the participants consider it a nice financial extra. Vockestaert plays an important role in this, being an agricultural nature association that 'speaks the language' of the participants. Although there are opportunities to increase the reward of some green services, participants are overall quite happy with it.
- **Fund structure** (stated by the interviewees): Rather than relying solely on incomes from developer contributions, it has patiently invested the incomes first to steadily build a larger fund. This continuous investment policy and the increasing return on capital that is gained from it ensure structural and long-term financial certainty. Each year, the fund grows because of their defensive investments, making Groenfonds less and less dependent on future developments. This decouples maintenance of green areas from development demand because Groenfonds will not rely on new developments in the future once green services can be paid 100% with the return on capital from their investments. This also differs from (national) government subsidies, which usually offer financial support for project implementation but very rarely for such long-term maintenance.
- A final success factor has been the choice to make Groenfonds a **non-profit public benefit institution**, as stated by the interviewees. This entity type is required to have statutes, which in this case turned the arrangements that were initially made because of a coincidental get-together of three (later four) municipalities into a long-term commitment. The entity structure and its statutes are independent of political changes or changes in office after elections. The board composition may change, but the statutes remain the same. Of course, these types of institutes can change their vision, but it does not happen often because it requires a majority of the board to support this change, meaning three of the four municipalities in this case. Similarly, the six-year contracts limit the administrative overhead to an application once every six years.

Groenfonds in its current form has **five general limitations**, which were stated by the interviewees or described in the latest audit report (2023).

- The first limitation is related to the final success factor. Because the board is composed of municipality aldermen, the **board composition changes after every election**. Since 2020, there have been more changes in office than usual due to staff changes, the early fall of The Hague's local government, and changes in office in Midden-Delfland. New board members are not always familiar with the origin and history of Groenfonds and may require some convincing of its purpose.
- Second, Groenfonds was initially founded to incentivise farmers to maintain green area elements. Because of this, **requirements for participation are tailored to farmers and exclude individual citizens**. Each applicant must have a company nature plan, which individual citizens do not have.
- The voluntary character of Groenfonds gives freedom to farmers to decide if they want to participate, and which green services they want to deliver. The voluntary character threatens to become a disadvantage when land of **retiring smaller dairy farmers is bought by large agricultural companies** that may not be interested in participating. This could be solved by tying contracts to the land instead of the company, ensuring that the contract is transferred if the land is purchased by another company.
- Until the new contract period starting in 2024, the **rewards have not been indexed** for some time, which risks making rewards less attractive for participants in future contract periods. For the new contract period starting in 2024, rewards have been increased once to match current conditions, but these remain fixed for the entire contract period of six years.
- Finally, there is a high participation rate of dairy farmers in Midden-Delfland, and **Groenfonds seems to have reached its maximum potential of participants**. It is unclear what the further growth potential is among dairy farms. On the other hand, Groenfonds is a flexible system that constantly allows the expansion of green services or the increase of the budget and rewards for individual services.

Transferability conditions and potential

Groenfonds has proven to be a successful mechanism to financially support the maintenance of green areas in agricultural landscapes by paying dairy farmers for delivering green services. The governance structure and financial model are straightforward and do not include the use of any radically new instruments. That makes it transferable and adaptable to other contexts. The investment volume of the programme is small (<€500,000 per year for green services), which is not unusual for these types of results-based financing. This does not



mean that this mechanism could not be used for larger volumes. Some general conditions are required to ensure its foundation and long-term operation.

- There must be a **common interest** between involved public bodies, and the financial reward should be high enough to be an incentive for farmers to participate. The number of public authorities or bodies involved is not predefined and can change.
- If the fund relies on contributions from developments, then there should be a **prospect of future developments** to have a large enough income stream to support the operations. This dependency is slowly decreased by investing the contributions first instead of using them directly to reward farmers. Depending on each context, other instruments such as annual fundraising (donations) or utility fees could be used to ensure an annual income stream for the fund.
- Turning the fund and its governance structure into a **foundation with a statutory objective** decouples it from political cycles. It also legitimises its operations for a longer term. Depending on the local context and legislative framework, other public entity types may be possible, but the idea is to make it more non-political.
- The **system should remain adaptive** and be able to change in response to different trends. Flexibility should allow for other parties to join (or maybe even leave) the organisation. Aside from the general statutory objective, the exact execution of that objective must remain flexible, i.e., having the possibility to change which services can be rewarded. The growing importance of grasslands for climate mitigation and adaptation reflects the growing importance of challenges posed by climate change that were deemed less urgent 20 years ago. Green services could perfectly include measures that support climate mitigation or adaptation, such as, in this case, the maintenance of historic grasslands through a large variety of grasses that make grasslands more climate-resistant to heat, droughts, and flooding.

Related factsheets

- Groenfonds is an example of results-based financing with characteristics of PES whereby rewards or compensations given to contracted parties, in this case, farmers, depend on whether they deliver a predetermined number of green services. Other examples of results-based financing, although through different financial models, are the Greater Cape Town Water Fund (ID 01), Ecomarkets (ID 04), Wetland Mitigation Banking (ID 17), and the Edwards Aquifer program (ID 20).
- The Groenfonds case shows how impacts from residential developments can be mitigated through developer obligations that are used to pay for the maintenance of green areas located near those developments. A similar case is the Dorset Heathlands (ID 12). The difference between both cases is that in the Dorset Heathlands, developer obligations are used directly to pay for mitigation measures, while in Groenfonds, developer obligations are first invested, after which the return on capital is used to pay farmers for delivering green services.

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