

Eerlijke
Verzekeringswijzer

Insuring biodiversity

Improving biodiversity by
transforming food systems

A case study for
the Fair Insurance Guide Netherlands



About the Eerlijke Verzekeringswijzer - Fair Insurance Guide Netherlands

This report has been commissioned by the Eerlijke Verzekeringswijzer (Fair Insurance Guide Netherlands). The Eerlijke Verzekeringswijzer is a coalition of the following organisations: Amnesty International, Milieudefensie, Oxfam Novib, PAX and World Animal Protection. The Eerlijke Verzekeringswijzer aims to encourage corporate social responsibility by insurance companies. For this study, the IUCN National Committee of the Netherlands was a content partner.

Fair Finance Guide Netherlands is part of Fair Finance International (FFI), an international civil society network with over 100 CSO partners and allies in fifteen countries, that seeks to strengthen the commitment of banks and other financial institutions to social, environmental and human rights standards.

About this report

This report looks into the biodiversity policy and actions of the Dutch insurance sector. Biodiversity is increasingly considered a material topic by Dutch insurers, this is for example shown in the number of Dutch insurers that are a member of the Finance for Biodiversity Pledge, via the working group biodiversity under the Sustainable Finance Platform of the DNB, and as the year theme for the agreement for international responsible investment in the insurance sector

With this research, the members of the Fair Insurance Guide wish to contribute to the intentions of the insurers, to reduce the negative impact on biodiversity (do no harm), contribute to reducing pressure on biodiversity and restoration (do good), and lastly increase the awareness of the general public of the importance of biodiversity and the role insurers can play in this regard.

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About the Hive

The Hive supports financial institutions and civil society organizations (CSO) to change the nature of finance. For example, by building the capacity of CSOs to engage with the finance sector. To scout and nurture innovative projects which can help bridge the global biodiversity funding gap. And by working with financial institutions to translate global commitments into practice. Because both sides are needed to support the transition to healthy societies and economies that thrive.

More information on the Hive can be found at www.natureoffinance.org

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Reading guide

This document is written for a diverse audience. We invite financial institutions to take note of this publication and use our recommendations to strengthen their work and policies. In specific we have aimed our study at the 9 insurance groups researched for this study: Achmea, Aegon, Allianz, ASR, Athora Netherlands (previously known as Vivat), NN Group, CZ, Menzis and VGZ. This study is also relevant for the general public – as almost everyone has some sort of insurance – it is important to know how your money is invested, and what impact both negative and positive this can have. Lastly, the Fair Insurance Guide is a coalition of Amnesty International, Milieudefensie, Oxfam Novib, PAX and World Animal Protection, but this publication is relevant for all NGOs working on similar topics. We invite policy makers, for example, those involved in the CBD negotiations, to take note of this study. Where relevant the images below are used to guide the reader to specific sections in the text.



FOR INSURERS



FOR THE
GENERAL PUBLIC



FOR NGOS AND
POLICY MAKERS

This document consists of three sections, that can be read chronologically but can also be read separately. Each section or chapter begins with a summary and is followed by a longer text that introduces the chapter. The research start with an explanation of the methodology, used, a long chapter in which the outcomes of the research are described. The last section of the report is the case studies. Within the broad topic of biodiversity, we have narrowed our research on the impact of monoculture agriculture on three subsectors, in this part of the report we provide the reader with a bottom-up perspective on the main impact in this sector. Further reading can be found in the annexes. Recommendations for the sector are highlighted in the report through the use of boxes, for example in the section on case studies.



EXPLANATION
METHODOLOGY



OUTCOMES
RESEARCH



CASE STUDIES

Executive Summary (English) –2022 a crucial junction for biodiversity



"We need to look at climate, biodiversity and land degradation as a three-fold crisis. We can't look at them separately because the solutions are also connected."

(Elizabeth Mrema, Executive Secretary of the Secretariat of the CBD and TNFD Co-chair)

Dragonflies are the proverbial canary in the coal mine for wetlands. Nearly a fifth of dragonflies are at threat of extinction due to habitat destruction according to the first global assessment of this species in the latest update of the IUCN Red List of Threatened Species¹. So whilst 'nature-positive' is gaining traction among businesses, financial institutions and governments alike, with a growing alphabet soup of initiatives, we are not yet seeing the transformative changes needed to protect and heal populations of threatened species.

Nature loss not only poses severe risks for people and animals, but also for business. According to research by the World Economic Forum, more than half of the world's economic output – US\$44tn of economic value generation – is moderately or highly dependent on nature.² The 2022 edition of the World Economic Forum (WEF) Global Risk Report ranked biodiversity loss as the third most severe global risk over the next 10 years.³ The 2019 Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) Global Assessment report showed that an estimated 1 million species are at risk of extinction, most of them in the near future⁴. This sharp decline of nature is driven mostly by human actions.

2022 will be a crucial year for the issue of biodiversity. After two years of delay, the COP15 is expected to be held in China. This will be the fifteenth edition of the Convention on Biological Diversity (CBD), which aims to close negotiations and define the Post-2020 Global Biodiversity Framework (GBF). It is expected that the GBF, in line with Article 2.1.c of the Paris Agreement- which referred to aligning financial flows to the pathway towards low greenhouse gas emissions and climate-resilient development- will include explicit targets for financial institutions and businesses. Almost 200 countries are due to adopt a global framework this year to safeguard nature by mid-century from the destruction wrought by humanity, with a key milestone of 30 percent protected by 2030. These ambitions will only be met with a new approach to biodiversity funding and a rethink of the huge sums spent on subsidies harmful to nature, according to observers.⁵

Leading investors increasingly realize that nature is next on the agenda. The financial sector has a critical role to play in ensuring the stability of the economy by taking biodiversity into account in the financing, underwriting and investment decisions. This can be translated into three interrelated goals. Firstly, to understand their exposure financial institutions needs to integrate nature-related risks more accurately and reliably into decision making, and based on this reduce their portfolio exposure in sectors and/or geographies with high impacts or dependencies on nature (e.g. agribusiness-related value chains) or already suffering from the combined consequences of ecosystems overexploitation and climate change (e.g. scarcity of quality water resources, desertification and loss of vegetation cover, etc).

Secondly, they need to invest in nature as a new asset class. The World Wildlife Fund LPR estimates that nature provides USD 125 trillion a year in free support to the world economy through pollinating insects such as bees, which are critical to global food production. This can be translated to the creation of revenue and jobs. For example, nature-based solutions can support a green transition pathway after the COVID-19 pandemic. And lastly, they need to support initiatives that promote the inclusion of financial institutions towards multilateral environmental agreements, such as the GBF and SDGs. Next to the monetary value of nature, investors should support and protect nature for its intrinsic value.

Focus on food

In addition, the COP15 draft biodiversity framework suggests the food industry may face dramatic changes. Today, only a handful of the major food companies have comprehensive programs to reduce the biodiversity pressure of their packaging, product portfolio and agricultural supply chains. Investors may also soon have to report on their portfolios' biodiversity footprints and alignment with biodiversity targets. Over the past two years, an increasing number of governments, including those of the G7 countries, have stepped up their plans to protect biodiversity, which is declining at rates unprecedented in human history. The food sector both impacts and relies heavily on biodiversity, and is widely considered the main cause of biodiversity loss.

It is expected that financial institutions including insurers soon want to know how food companies will decrease their biodiversity footprint and want to know how they could be financially impacted by biodiversity loss and increased regulatory costs and reduced fiscal subsidies, as well as ensure that their exposure to biodiversity loss is aligned with national and international goals and comply with emerging requirements to report on their biodiversity footprint.



Purpose of research

This research zoomed in on biodiversity by focusing on our food system and the interrelated land/sea use change as a driver of biodiversity loss and focusses in specific on

- Other mono-cultures than soy/beef and palm oil. In previous reports, the Fair Insurance Guide (FIG) has already focused on soy/beef and palm oil. The biodiversity risks of these sectors are relatively well-known amongst investors.
- The need for systems change in our food production.

This study has therefore focused on actors in three sectors that have a great impact in the ecosystems where they operate: **maize, salmon aquaculture and cocoa**. Producers, traders, food and feed manufacturers and retailers have a shared responsibility to protect the biodiversity in productive landscapes and seascapes. This supply chain responsibility is defined by the OECD Guidelines for Multinational Enterprises.

Biodiversity is gaining traction on the agenda of insurance groups with activities on the Dutch market. Insurers participate in the Finance for Biodiversity Pledge and the Platform Duurzame Financiering. Furthermore, the 2021 theme of the ICSR covenant of the insurance sector was biodiversity. The goal of this study is to assess if insurers invest in activities that have a severe impact on biodiversity. In addition, with this study, the NGOs in the Eerlijke Verzekeringswijzer aim to support the ICSR covenant of the insurance sector by showing concrete examples of how insurers:

- Have a negative impact on biodiversity (do no harm); and
- Have a positive impact on biodiversity (do good).

By highlighting best practices and drafting recommendations, the report should provide insurers with guidance on how to improve their investment practices regarding biodiversity. The study also aims to improve consciousness amongst the Dutch public and government about the urgency of stopping biodiversity loss and the role of insurers in this.



Main outcomes

Biodiversity is increasingly becoming a hot topic in the financial sector. But while it entered the mainstream investment agenda only in the past two years, the topic did not come out of the blue. Well-informed investors have already worked on the topic for years. This study shows that detailed investment policies with concrete requirements for investees are a necessary condition for successful screening and engagement trajectories. Not surprisingly, the insurers with high scores for the regular Fair Insurance Guide policy assessments also score very well in this research. This reports gives detailed information on their scores and provides opportunities for improvement.

The results of our research show that the financial institutions that have started integrating biodiversity in their investment processes years ago, are better aware of the risks and mitigate these energetically through screening, engagement, voting and exclusion. But we also note a lack of consistency in reporting methods. For this reason, we welcome initiatives such as TNFD, and PBAF that assist financial institutions in measuring their impact and dependencies on nature, and the related nature-related risks and opportunities.

Investors need to learn to create an integrated approach and look beyond the usual suspects when it comes to nature-related impact and dependencies. Until now most attention has been given to relatively well-known deforestation commodities such as palm oil and soy. The focus on a small number of high impact commodities shows that there is not yet an integrated approach towards nature-related risk and opportunities. Echoing the WBCSD vision 2050 –a shared vision of a world in which more than 9 billion people can live well, within planetary boundaries, by 2050. To achieve this vision, corporates need to put in more than just words. They need to show measurable commitment to transformation at scale, and the business needs to focus its actions on the areas through which it can best lead the systems transformations.

As a provider of finance, insurers as a subset of the financial sector have an important role to play in spearheading this transformation. Next to historic impacts, for which responsibility needs to be taken via a risk lens, a forward looking vision should be added, they should shift their vision forward and looking at how the finance sector can lead a transformation. This includes, but is not limited to the global food system. We recommend the Dutch insurers to reviewed take an inclusive and innovative approach to include food finance in their work.

What is more, they also seize the opportunity to search for nature-positive investments. This is a space that is under a lot of interest at the moment, and although standard definitions are emerging now, this should not limit the Dutch insurers reviewed to look for opportunities to invest in and with nature. This is urgently needed, as we need to transform the cocoa, corn and salmon value chains into sectors different approaches to food production and consumption which allow biodiversity can to flourish.



Results

Integration of nature is starting to emerge, but for a blossoming of nature, more concrete action, measurable targets and a clear vision for the future is needed. Within the group of 9 reviewed insurers, we see a leaders group consisting of three organisations – Achmea, Athora Netherlands and ASR. Within this leaders group, ASR received the overall highest score of 10 – partly due to a bonus point.

It is good to note, that each of these organisations had a high score on all reviewed elements of this assessment, with an almost even score on policy (20%), investments (60%), and nature-positive investments (20%). We found it commendable that among this leaders group, further action will be taken which resulted in a bonus point for commitment for each one of them.

NN Group and CZ make up the middle group, with Aegon, Allianz, Menzis and VGZ lagging. Almost all groups have committed to improving their biodiversity investment practices.

All insurance companies, except Allianz and Aegon, showed a willingness to provide feedback on the questionnaire. As such, Allianz and Aegon received no points for the questionnaire on screening, engagement, voting and exclusion, as well as the nature-positive investments section. This may have led to a lower score. At the same time, the three health insurance groups (CZ, Menzis, VGZ) with limited investments in the selected companies fully cooperated with this study. This is laudable and shows the willingness of these groups to increase biodiversity integration in their investment practices.

Table 1 Overview scores

Insurance group	Total score	Policy (20%)	Investments (60%)	Nature - positive investments (20%)	Bonus point for commitment
Achmea	8	7,4	7,8	5	1
Aegon	1	1	0	0	0
Allianz	1	2,8	0	0	0
ASR	10	8,7	8,4	10	1
Athora Netherlands	8	9,5	7,4	2,5	1
CZ	5	2,1	5,6	0	1
Menzis	2	1	2	0	1
NN Group	6	4,2	6,2	2,5	1
VGZ	2	1	0	0	1

Based on the review in this report we conclude and recommend:

Policy assessment

As part of this study, the investment policies of the insurers are checked (at the group level) for investment criteria on biodiversity. This review found that the Dutch insurance groups' review lacks a vision and a clear pathway towards changing their impact on nature. Except for Athora Netherlands, none of the 9 insurers reviewed has included in their policies a contribution to an ambitious, time-bound shift from monoculture plantations to a transformation in the food system, for example via polyculture farming, for the companies they invest in.

This makes it impossible for them to consider a forward-looking lens when assessing their current investment portfolio and look for opportunities going forward. Only a limited sample of insurers – Athora Netherlands and ASR – invest in companies that actively invest in the restoration of vulnerable biodiversity.

When looking at the prevention of negative impacts on protected areas that fall under the categories I-IV of the International Union for Conservation of Nature (IUCN) within their business operations and the areas they manage, more than half of the insurers have included this in their policies. However, when looking at categories V and VI again only two insurers (Allianz and ASR) have made this part of their limited approach. Category V - Protected Landscape/Seascape, and category VI - Protected area with sustainable use of natural resources have been added to this study specifically as we believe that these generally large areas are placed which under the application of an integrated landscape approach provide space for nature and economy to go hand-in-hand. We recommend the insurers consider not limiting their approach to the IUCN protected areas as a tick the box exercise but as an approach to look for opportunities for investing in nature. For example in Madagascar, a more flexible approach to protected area management has been adopted, to maximize direct and indirect uses of natural resources while also safeguarding biodiversity. Here economic development on the fringes of national parks has helped to restore local biodiversity.

Investments

Under investments, we looked at four sub-components – screening, engagement, voting, exclusion. Here we zoomed in on the 15 publicly listed companies in the cocoa, maize and salmon aquaculture value chain. The value chain consists of (from upstream to downstream) growers, suppliers of agricultural products like pesticides, traders, food and consumer goods producers, retailers. Some companies are active in more than one of these sectors. The assessment here was different for each insurer depending on the number of companies they had a direct relationship with. The selection process has resulted in the following list of 15 companies:

- Maize: ADM, MHP, Long Ping High-Tech, Tyson Foods;
- Salmon: Mowi, Lerøy Seafood Group, Multiexport, Grieg Seafood, Aqua Chile;
- Cocoa: Mondelez International, Nestle, Hershey, Lindt/Sprungli, Meiji Co.
- Retail: Walmart.

Under screening we looked at if the insurer screens its investment portfolio on biodiversity issues, as defined in the investment criteria on biodiversity in this study, this section was given a 20% of the total score. As engagement is a suitable mechanism for promoting change within a company 40% of the total score was given to this component, which included a reference to the SMARTT methodology (more under paragraph 1.1.2). Another 20% score was given both to voting and exclusion criteria.

Under screening Achmea, ASR, Menzis and NN Group had a combined high score. Under engagement, ASR and Athora Netherlands had the highest score. On voting ASR had the highest score. Under exclusions, it was interesting to see CZ having the highest score. Showing that certain organisations have unique views on their investment screening.

Nature-positive investments

All insurance groups were asked to provide evidence for the positive impact on biodiversity and the absence of severe negative impacts of investments in any of the three sectors: cocoa, maize, salmon aquaculture. This component was added to this research, partly at the request from the insurers to also be reviewed on the positive impact. As described in the methodology (see paragraph 1.2.3.), the bar for awarding points is high. The Fair Insurance Guide expects a nature-positive investment to follow the principles described in the IPBES Global Assessment report.

This element of the research was the most debated element of the study, which resulted from an overall absence of an agreed definition of what constitutes a nature-positive investment. Many examples were shared in which it was unclear how this investment contributed to a shift in global financial flows from nature-negative towards nature-positive. In other cases, it was unclear what the role of the insurer was in a specific investment, and to which extent their investment was to be considered meaningful.

Financing Nature: Closing the Global Biodiversity Financing Gap by Cornell University, TNC and the Paulson institute have concluded that we need to redirect nearly a trillion USD annually to close the global biodiversity funding gap – so the difference between how much is currently spend and how much is needed to preserve nature and the services it provides. This gap can only be closed by addressing and three sides of the equation: reduce harmful economic activity such as agricultural subsidies, generate new revenue, and invest smarter.



Case studies

This study on biodiversity includes several case studies or examples of specific sub-sectors with a high impact and dependency on nature. These studies are a novelty in FIG case studies and have been added to this report to inform the reader about the impacts of other sectors than well-known high deforestation risk sectors such as soy/beef and palm oil.

With this work, we want to show that there is biodiversity consideration to be kept in mind with other sectors as well. With these studies, we also aim to show the constraints of monoculture farming on nature and people.

Monoculture is essentially the opposite of polyculture. The uniformity of monocultures and industrial-scale livestock rearing can leave these systems vulnerable to economic, climate-induced and natural disaster shocks that result in significant economic losses and large-scale suffering of rural communities. Maintaining a diverse variety of crop species and growing a varied range of crops can save the potential jeopardizing of the entire economy.

Never tasted chocolate? The first case study featured in this report zoomed in on Ghana and showed that monoculture and no compensation for biodiversity-friendly cacao production continue to prevail despite the efforts of Nestlé and others. The second case study on salmon aquaculture showed that the real price of salmon in Chile is paid by its worker and the environment. We believe the growth of the Chilean salmon industry should be matched with actions that reduce the impact of the industry on the environment and people. The last case study looked into maize (or corn). Maize is the most-produced grain crop and has hundreds of varieties, yet when it comes to sustainability action it is often overlooked. In this case study, we made our case for the transition of our global food systems. As natural resource use and emissions associated with modern food systems can be significantly reduced by shifting towards a circular food system, as the example of Kipster have shown. In each case studies recommendation for investors are given.

Next steps



The research has shown that the 9 insurance groups are increasingly aware of the impact of biodiversity loss on their risk assessment and are looking for ways for investing in nature. Based on this research we recommend the following next steps:



- **Need for collaboration:** *If you want to go fast go alone, if you want to go far go together.* In line with this African proverb, collaboration within the sector and with other stakeholders is crucial in bending the curve of biodiversity loss. For this the building of trust and understanding is crucial. The absence of trust between different players is impeding progress and slows down building collaborative solutions.
- **Need for more research on impact and opportunities:** As part of this research, we looked into the impact of monoculture farming in three sub-sectors. This research showed a representative sample of current policies and investments, but more research is needed. We recommend looking into how research such as the landmark 'Indebted to Nature' by the Dutch Central Bank can be replicated and applied⁶.
- **Need for clear targets and goals:** In the absence of a Paris goal for nature, and a clear methodology of measuring impact and dependency on nature, it will continue to be complex to measure and assess impact. We recommend active participation and collaboration of the insurers in initiatives such as TNFD. Until now, interest from (commercial) banks has prevailed. Insurers are invited to join these initiatives, with both their investments and also to show the opportunities in investing in nature, for example explored by AXA in their work in reducing risk through mangrove protection and restoration. On how insurance could cost-effectively help protect and restore these uniquely valuable ecosystems across the Caribbean region.

Samenvatting (Nederlands) – 2022 een kruispunt voor de natuur?



We moeten klimaat, biodiversiteit en land degradatie zien als een drievoudige crisis. We kunnen ze niet los van elkaar bekijken omdat de oplossingen ook met elkaar verbonden zijn.”

(Elizabeth Mrema, uitvoerend secretaris van het secretariaat van de CBD en mede-voorzitter van de TNFD)

Libellen zijn de spreekwoordelijke kanarie in de kolenmijn voor wetlands. Volgens de eerste wereldwijde beoordeling van deze soort in de laatste update van de IUCN Rode Lijst van Bedreigde Soorten wordt bijna een vijfde van de libellen met uitsterven bedreigd als gevolg van de vernietiging van hun leefgebied. Dus hoewel 'natuurpositief' steeds meer terrein wint bij bedrijven, financiële instellingen en overheden, met een groeiende alfabetsoep van initiatieven, zien we nog niet de transformatieve veranderingen die nodig zijn om populaties van bedreigde soorten te beschermen en te genezen.

Natuurverlies brengt niet alleen grote risico's met zich mee voor mens en dier, maar ook voor het bedrijfsleven. Volgens onderzoek van het World Economic Forum is meer dan de helft van de economische productie in de wereld – 44 biljoen dollar aan economische waarde creatie – matig tot sterk afhankelijk van de natuur. In de 2022 editie van het Global Risk Report van het World Economic Forum (WEF) wordt het verlies aan biodiversiteit beoordeeld als het op twee na grootste wereldwijde risico in de komende 10 jaar. Uit het Global Assessment-rapport van het Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) uit 2019 blijkt dat naar schatting 1 miljoen soorten met uitsterven worden bedreigd, waarvan de meeste in de nabije toekomst. Deze scherpe achteruitgang van de natuur wordt grotendeels gedreven door menselijk handelen.

Het wordt verwacht dat 2022 een cruciaal jaar voor biodiversiteit zal zijn. Na twee jaar vertraging wordt de COP15 naar verwachting in China gehouden. Dit wordt de vijftiende editie van de Convention on Biological Diversity (CBD), die tot doel heeft de onderhandelingen af te sluiten en het post-2020 Global Biodiversity Framework (GBF) te definiëren. De verwachting is dat de GBF, in lijn met artikel 2.1.c van het Akkoord van Parijs - waarin werd gesproken over het afstemmen van financiële stromen op het pad naar een lage uitstoot van broeikasgassen en klimaatbestendige ontwikkeling - expliciete doelstellingen voor financiële instellingen en bedrijven zal bevatten. Bijna 200 landen zijn verwacht dit jaar een mondiaal kader aannemen om de natuur tegen het midden van de eeuw te beschermen tegen de vernietiging die door de mensheid is aangericht, met een belangrijke mijlpaal van 30% beschermde gebieden voor 2030. Deze ambities zullen alleen worden bereikt met een nieuwe benadering van de financiering van biodiversiteit en een heroverweging van de enorme bedragen die zijn uitgegeven aan subsidies die schadelijk zijn voor de natuur.

Vooraanstaande beleggers beseffen steeds vaker dat de natuur het volgende thema op de agenda is. De financiële sector speelt een cruciale rol bij het waarborgen van de stabiliteit van de economie door rekening te houden met biodiversiteit bij financierings-, acceptatie- en investeringsbeslissingen. Dit kan worden vertaald in drie onderling samenhangende doelen. Ten eerste, om hun blootstelling te begrijpen, moeten financiële instellingen natuur gerelateerde risico's nauwkeuriger en betrouwbaarder integreren in de besluitvorming, en op basis hiervan hun portefeuilleblootstelling verminderen in sectoren en/of geografische gebieden met een grote impact of afhankelijkheid van de natuur (bijv. ketens) of die al lijden onder de gecombineerde gevolgen van overexploitatie van ecosystemen en klimaatverandering (bv. schaarste aan hoogwaardige watervoorraden, woestijnvorming en verlies van vegetatie, enz.).

Ten tweede moeten ze investeren in de natuur als nieuwe beleggingscategorie. Het Wereldnatuurfonds Living Planet Report (LPR) schat dat de natuur jaarlijks 125 biljoen dollar gratis steun aan de wereldeconomie geeft, door middel van bestuivende insecten zoals bijen, die essentieel zijn voor de wereldwijde voedselproductie. Dit kan worden vertaald naar het creëren van inkomsten en banen. Natuur gebaseerde oplossingen kunnen bijvoorbeeld een groen transitiepad ondersteunen na de COVID-19-pandemie. En tot slot, moeten ze initiatieven ondersteunen die de inclusie van financiële instellingen bij multilaterale milieuovereenkomsten, zoals de GBF en SDG's, bevorderen. Naast de geldelijke waarde van natuur, moeten beleggers de natuur steunen en beschermen vanwege haar intrinsieke waarde.

Focus op voedsel

Bovendien suggereert het COP15-GBF voor biodiversiteit dat de voedingsindustrie met dramatische veranderingen te maken kan krijgen. Tegenwoordig heeft slechts een handvol van de grote voedingsbedrijven uitgebreide programma's om de druk op de biodiversiteit van hun verpakkingen, productportfolio en landbouwtoeleveringsketens te verminderen. Het kan zijn dat beleggers binnenkort ook moeten rapporteren over de biodiversiteitsvoetafdruk van hun portefeuilles en de afstemming op de biodiversiteitsdoelstellingen. In de afgelopen twee jaar hebben steeds meer regeringen, waaronder die van de G7-landen, hun plannen opgevoerd om de biodiversiteit te beschermen, die met ongekende snelheden achteruitgaat. De voedselsector heeft een impact op en is sterk afhankelijk van biodiversiteit, en wordt algemeen beschouwd als de belangrijkste oorzaak van het verlies aan biodiversiteit.

Verwacht wordt dat financiële instellingen, waaronder verzekeraars, binnenkort willen weten hoe voedingsbedrijven hun voetafdruk op het gebied van biodiversiteit kunnen verkleinen en willen weten hoe zij financieel kunnen worden beïnvloed door het verlies aan biodiversiteit en hogere regelgevingskosten en verminderde fiscale subsidies, en om ervoor te zorgen dat hun blootstelling en het verlies van biodiversiteit is afgestemd met nationale en internationale doelen en voldoet aan de nieuwe vereisten om te rapporteren over hun biodiversiteitsvoetafdruk.



Doel van praktijkstudie

Deze praktijkstudie richt zich op biodiversiteit door zich daarbinnen te focussen op ons voedselsysteem en de daarmee samenhangende verandering van land/zee-gebruik als aanjager van biodiversiteitsverlies en richt zich specifiek op:

- Andere monoculturen dan soja/rundvlees en palmolie. De Eerlijke Verzekeringswijzer (FIG) besteedde in eerdere rapporten al aandacht aan soja/rundvlees en palmolie. De biodiversiteitsrisico's van deze sectoren zijn relatief bekend bij investeerders.
- De noodzaak van systeemverandering onze voedselproductie.

Dit onderzoek heeft zich daarom gericht op actoren in drie sectoren die een grote impact hebben in de ecosystemen waarin ze actief zijn: maïs, aquacultuur van zalm en cacao. Producenten, handelaren, producenten van levensmiddelen en diervoeders en retailers hebben een gedeelde verantwoordelijkheid om de biodiversiteit in productieve landschappen en zeegezichten te beschermen. Deze ketenverantwoordelijkheid wordt gedefinieerd door de OESO-richtlijnen voor multinationale ondernemingen.

Biodiversiteit komt steeds meer op de agenda van verzekeringsgroepen met activiteiten op de Nederlandse markt. Zo participeren zij in de Finance for Biodiversity Pledge en het Platform Duurzame Financiering. Verder was afgelopen jaar het thema van het IMVO-convenant van de verzekeringssector 2021 het thema biodiversiteit. Het doel van dit onderzoek is om te beoordelen of verzekeraars investeren in activiteiten die een grote impact hebben op de biodiversiteit. Daarnaast willen de NGO's in de Eerlijke Verzekeringswijzer met dit onderzoek het IMVO-convenant van de verzekeringssector ondersteunen door concrete voorbeelden te laten zien van hoe verzekeraars:

- Een negatieve impact hebben op de biodiversiteit (do no harm); en
- Een positieve impact hebben op de biodiversiteit (do good).

Door best practices te benadrukken en aanbevelingen op te stellen, zal dit rapport verzekeraars handvatten bieden om hun beleggingspraktijken met betrekking tot biodiversiteit te verbeteren. Het onderzoek heeft ook tot doel het bewustzijn bij Nederlandse burgers en overheid te vergroten over de urgentie van het stoppen van biodiversiteitsverlies en de rol van verzekeraars daarin.



Belangrijkste resultaten

Biodiversiteit wordt steeds meer een hot topic in de financiële sector. Maar hoewel het pas in de afgelopen twee jaar op de reguliere investeringsagenda staat, kwam dit niet uit de lucht vallen. Goed geïnformeerde beleggers werken al jaren aan het onderwerp. Dit onderzoek laat zien dat een gedetailleerd investeringsbeleid met concrete eisen aan investeringen een noodzakelijke voorwaarde is voor succesvolle screening- en engagementtrajecten. Het is dan ook niet verwonderlijk dat de verzekeraars met hoge scores op de reguliere beoordelingen van de Eerlijke Verzekeringswijzer ook goed scoren in deze casus. Dit rapport geeft gedetailleerde informatie over hun scores en biedt mogelijkheden voor verbetering.

De resultaten van ons onderzoek laten zien dat de financiële instellingen die jaren geleden zijn begonnen met het integreren van biodiversiteit in hun beleggingsprocessen, de risico's beter kennen en voortvarend mitigeren door middel van screening, engagement, stemmen en uitsluiting. Maar we constateren ook een gebrek aan consistentie in rapportagemethoden. Daarom verwelkomen we initiatieven zoals TNFD en PBAF die financiële instellingen helpen bij het meten van hun impact en afhankelijkheid van natuur, en de daaraan gerelateerde natuur gerelateerde risico's en kansen.

Beleggers moeten leren een integrale aanpak te creëren en verder te kijken als het gaat om natuur gerelateerde effecten en afhankelijkheden. Tot nu toe gaat de meeste aandacht uit naar relatief bekende ontbossingsgrondstoffen zoals palmolie en soja. De focus op een klein aantal hoog-risico producten laat zien dat er nog geen integrale benadering is van natuur gerelateerde risico's en kansen. In navolging van de WBCSD-visie 2050 - een wereld waarin tegen 2050 meer dan 9 miljard mensen goed kunnen leven, binnen planetaire grenzen. Om deze visie te bereiken, moeten bedrijven meer zeggen dan alleen woorden. Ze moeten een meetbare inzet tonen voor transformatie op schaal, en het bedrijf moet zijn acties richten op de gebieden waardoor het de systeemtransformaties het beste kan leiden.

Als financier hebben verzekeraars als onderdeel van de financiële sector een belangrijke rol te spelen bij het aansturen van deze transformatie. Naast historische effecten, waarvoor verantwoordelijkheid moet worden genomen via een risico-lens, moet een toekomstgerichte visie worden toegevoegd, moeten ze hun visie naar voren verschuiven en kijken hoe de financiële sector een transformatie kan leiden. Dit omvat, maar is niet beperkt tot, het wereldwijde voedselsysteem. Wij raden de Nederlandse verzekeraars aan om een inclusieve en innovatieve aanpak te hanteren om voedsel financiering in hun werk te betrekken.

Bovendien grijpen ze de kans ook aan om op zoek te gaan naar natuurpositieve investeringen. Dit is een ruimte die momenteel veel in de belangstelling staat, en hoewel er nu standaard definities ontstaan, mag dit de beoordeelde Nederlandse verzekeraars niet beperken om te zoeken naar mogelijkheden om met de natuur te investeren. Dit is dringend nodig, aangezien we de waardeketen van cacao, maïs en zalm moeten omvormen tot sectoren met verschillende benaderingen van voedselproductie en -consumptie, waardoor de biodiversiteit kan floreren.

Uitkomsten

Integratie van de natuur begint te ontstaan, maar voor een bloei van de natuur zijn meer concrete acties, meetbare doelen en een heldere visie op de toekomst nodig. Binnen de groep van 9 beoordeelde verzekeraars zien we een kopgroep bestaande uit drie organisaties – Achmea, Athora Nederland en ASR. Binnen deze kopgroep heeft ASR de overall hoogste score van 10 gekregen – mede dankzij een bonuspunt. Het is goed om te constateren dat elk van deze organisaties hoog scoort op alle beoordeelde onderdelen van deze beoordeling, met een bijna gelijke score op beleid (20%), investeringen (60%) en natuurpositieve investeringen (20%). We vonden het lovenswaardig dat er binnen deze kopgroep verdere actie wordt ondernomen wat resulteerde in een bonuspunt voor inzet voor elk van hen.

NN Group en CZ vormen de middengroep, waarbij Aegon, Allianz, Menzis en VGZ achterblijven. Bijna alle groepen hebben zich ertoe verbonden hun investeringspraktijken in biodiversiteit te verbeteren.

Alle verzekeraars, behalve Allianz en Aegon, toonden zich bereid om feedback te geven op de vragenlijst. Zo hebben Allianz en Aegon geen punten gekregen voor de vragenlijst over screening, engagement, stemmen en uitsluiting en voor het onderdeel natuurpositief beleggen. Dit heeft mogelijk geleid tot een lagere score. Tegelijkertijd hebben de drie zorgverzekeraars (CZ, Menzis, VGZ) met beperkte investeringen in de geselecteerde bedrijven volledig meegewerkt aan dit onderzoek. Dit is prijzenswaardig en toont de bereidheid van deze groepen om de integratie van biodiversiteit in hun investeringspraktijken te vergroten.

Table 2 **Overzicht scores**

Verzekeringsgroep	Totale score	Beleid (20%)	Investeringen (60%)	Natuur positieve investeringen (20%)	Bonus point voor commitment
Achmea	8	7,4	7,8	5	1
Aegon	1	1	0	0	0
Allianz	1	2,8	0	0	0
ASR	10	8,7	8,4	10	1
Athora Netherlands	8	9,5	7,4	2,5	1
CZ	5	2,1	5,6	0	1
Menzis	2	1	2	0	1
NN Group	6	4,2	6,2	2,5	1
VGZ	2	1	0	0	1

Op basis hiervan concluderen wij:

Beleidsbeoordeling

Als onderdeel van dit onderzoek wordt het investeringsbeleid van de verzekeraars (op groepsniveau) getoetst op investeringscriteria op het gebied van biodiversiteit. Uit deze review bleek dat de Nederlandse verzekeringsgroepen een visie en een duidelijke route missen om hun impact op de natuur te verminderen. Behalve Athora Nederland heeft geen van de 9 onderzochte verzekeraars in hun beleid een bijdrage opgenomen aan een ambitieuze, tijdgebonden verschuiving van monocultuurplantages naar een transformatie in het voedselsysteem, bijvoorbeeld via polyculture farming, voor de bedrijven waarin zij investeren. Dit maakt het voor hen onmogelijk om een toekomstgerichte lens in overweging te nemen bij het beoordelen van hun huidige beleggingsportefeuille en op zoek te gaan naar kansen in de toekomst. Slechts een beperkte steekproef van verzekeraars – Athora Nederland en ASR – investeert in bedrijven die actief investeren in het herstel van kwetsbare biodiversiteit.

Als we kijken naar het voorkomen van negatieve effecten op beschermde gebieden die vallen onder de categorieën I-IV van de International Union for Conservation of Nature (IUCN) binnen hun bedrijfsvoering en de gebieden die zij beheren, dan heeft meer dan de helft van de verzekeraars dit opgenomen in hun beleid. Als we echter opnieuw kijken naar de categorieën V en VI, hebben slechts twee verzekeraars (Allianz en ASR) dit onderdeel gemaakt van hun aanpak. Categorie V - Beschermde Landschap/Zeegezicht, en categorie VI - Beschermde gebied met duurzaam gebruik van natuurlijke hulpbronnen zijn specifiek aan dit onderzoek toegevoegd omdat wij van mening zijn dat deze doorgaans grote gebieden worden geplaatst die bij toepassing van een integrale landschappelijke benadering ruimte bieden aan natuur en economie hand in hand gaan. We raden de verzekeraars aan om te overwegen hun benadering van de IUCN-beschermde gebieden niet te zien als een vinkje, maar als een benadering om te zoeken naar mogelijkheden om te investeren in de natuur. In Madagaskar is bijvoorbeeld een flexibelere benadering van het beheer van beschermde gebieden aangenomen, om het directe en indirecte gebruik van natuurlijke hulpbronnen te maximaliseren en tegelijkertijd de biodiversiteit te beschermen. Hier heeft economische ontwikkeling aan de rand van nationale parken bijgedragen aan het herstel van de lokale biodiversiteit.

Investeringsen

Bij investeringen hebben we gekeken naar vier sub-componenten: screening, engagement, stemmen, uitsluiting. Hier zoomden we in op de 15 beursgenoteerde bedrijven in de waardeketen van cacao, maïs en kweekzalm. De waardeketen bestaat uit (van stroomopwaarts tot stroomafwaarts) telers, leveranciers van landbouwproducten zoals pesticiden, handelaren, producenten van voedsel en consumptiegoederen, retailers. Sommige bedrijven zijn in meer dan één van deze sectoren actief. De beoordeling was hier per verzekeraar verschillend, afhankelijk van het aantal bedrijven waarmee ze een directe relatie hadden. Het selectieproces heeft geresulteerd in de volgende lijst van 15 bedrijven:

- Maïs: ADM, MHP, Long Ping High-Tech, Tyson Foods;
- Kweekzalm: Mowi, Lerøy Seafood Group, Multiexport, Grieg Seafood, Aqua Chile;
- Cacao: Mondelez International, Nestle, Hershey, Lindt/Sprungli, Meiji Co.
- Detailhandel: Walmart.

Bij screening hebben we gekeken of de verzekeraar zijn beleggingsportefeuille screent op biodiversiteitsthema's, zoals gedefinieerd in de investeringscriteria voor biodiversiteit in dit onderzoek, dit onderdeel kreeg 20% van de totaalscore. Omdat engagement werd gezien als een geschikt mechanisme is om verandering binnen een bedrijf te bevorderen, werd 40% van de totale score aan dit onderdeel gegeven, inclusief een verwijzing naar de SMARTT-methodologie (meer in paragraaf 1.1.2). Een andere score van 20% werd gegeven aan zowel stem- als uitsluitingscriteria.

Onder screening scoorden Achmea, ASR, Menzis en NN Group gecombineerd hoog. Onder engagement scoorden ASR en Athora Nederland het hoogst. Bij het stemmen had ASR de hoogste score. Bij uitsluitingen was het interessant om te zien dat CZ de hoogste score had. Laat zien dat bepaalde organisaties een unieke kijk hebben op hun investeringscreening.

Natuur positieve investeringen

Alle verzekeringsgroepen werd gevraagd om bewijs te leveren voor de positieve impact op de biodiversiteit en de afwezigheid van ernstige negatieve effecten van investeringen in een van de drie sectoren: cacao, maïs en kweekzalm. Dit onderdeel is, mede op verzoek van de verzekeraars, aan deze casus toegevoegd om ook te kijken naar de positieve impact. Zoals beschreven in de methodiek (zie paragraaf 1.2.3.) ligt de lat voor het toekennen van punten hoog. De Eerlijke Verzekeringwijzer verwacht dat een natuurpositieve belegging de principes volgt die zijn beschreven in het IPBES Global Assessment-rapport.

Dit onderdeel van het onderzoek was het meest besproken onderdeel van het onderzoek, dat het gevolg was van een afwezigheid van een overeengekomen definitie van wat een natuurpositieve investering is. Er werden veel voorbeelden gedeeld waarbij onduidelijk was hoe deze investering heeft bijgedragen aan een verschuiving in mondiale financiële stromen van natuur-negatief naar natuur-positief. In andere gevallen was het onduidelijk wat de rol van de verzekeraar was bij een bepaalde belegging en in hoeverre hun belegging als zinvol moest worden beschouwd.

Financing Nature: Closing the Global Biodiversity Financing Gap door Cornell University, TNC en het Paulson Institute hebben geconcludeerd dat we jaarlijks bijna een biljoen USD moeten heroriënteren om de wereldwijde financieringskloof voor biodiversiteit te dichten - dus het verschil tussen hoeveel er momenteel wordt uitgegeven en hoeveel nodig is voor het behoud van de natuur en haar dienstverlening. Deze kloof kan alleen worden gedicht door drie kanten aan te pakken: schadelijke economische activiteiten zoals landbouwsubsidies verminderen, nieuwe inkomsten genereren en slimmer investeren.



Casestudy's

Dit onderzoek naar biodiversiteit omvat verschillende casestudies over deelsectoren met een hoge impact en afhankelijkheid van de natuur. Deze studies zijn nieuw in de FIG-casestudy's en zijn aan dit rapport toegevoegd om de lezer te informeren over de gevolgen van andere sectoren dan de bekende sectoren met een hoog ontbossingsrisico, zoals soja/rundvlees en palmolie.

Met dit werk willen we laten zien dat ook bij andere sectoren rekening moet worden gehouden met biodiversiteit. Met deze onderzoeken willen we ook de beperkingen van monocultuurlandbouw op natuur en mens laten zien.

Monocultuur is in wezen het tegenovergestelde van polycultuur. De uniformiteit van monoculturen en veeteelt op industriële schaal kan deze systemen kwetsbaar maken voor economische, klimaat gerelateerde en natuurrampen die leiden tot aanzienlijke economische verliezen en grootschalig lijden van plattelandsgemeenschappen. Het in stand houden van een grote verscheidenheid aan gewassoorten en het verbouwen van een gevarieerd aanbod van gewassen kan het potentiële gevaar voor de gehele economie voorkomen.

Nog nooit chocolade geproefd? De eerste case studie in dit rapport zoomde in op Ghana en toonde aan dat monocultuur en geen compensatie voor biodiversiteitsvriendelijke cacao productie blijven bestaan, ondanks de inspanningen van Nestlé en anderen. De tweede case studie over de aquacultuur van zalm toonde aan dat de echte prijs van zalm in Chili wordt betaald door de werknemer en het milieu. Wij zijn van mening dat de groei van de Chileense zalmindustrie gepaard moet gaan met acties die de impact van de industrie op het milieu en de mensen verminderen. In de laatste case studie is gekeken naar maïs. Maïs is het meest geproduceerde graangewas en heeft honderden variëteiten, maar als het op duurzaamheid aankomt, wordt het vaak over het hoofd gezien. In deze case studie maakten we ons sterk voor de transitie van onze wereldwijde voedselsystemen. Omdat het gebruik van natuurlijke hulpbronnen en de uitstoot van moderne voedselsystemen aanzienlijk kunnen worden verminderd door over te schakelen naar een circulair voedselsysteem, zoals het voorbeeld van Kipster heeft aangetoond. In elke casestudie worden aanbevelingen voor investeerders gegeven.



Volgende stappen

Uit het onderzoek blijkt dat de 9 verzekeringsgroepen zich steeds meer bewust zijn van de impact van biodiversiteitsverlies op hun risicobeoordeling en op zoek zijn naar manieren om te investeren in de natuur. Op basis van dit onderzoek bevelen wij de volgende



vervolgstappen aan:

- Meer samenwerking: 'als je snel wilt gaan, ga dan alleen, als je ver wilt komen, ga dan samen.' In lijn met dit Afrikaanse spreekwoord is samenwerking binnen de sector en met andere stakeholders cruciaal om de curve van het verlies aan biodiversiteit door te buigen. Hiervoor is het opbouwen van vertrouwen en begrip cruciaal. Het gebrek aan vertrouwen tussen verschillende spelers belemmert de voortgang en vertraagt het bouwen van gezamenlijke oplossingen.
- Meer onderzoek naar impact en kansen: Als onderdeel van dit onderzoek hebben we gekeken naar de impact van monocultuurlandbouw in drie sub sectoren. Dit onderzoek toonde een representatieve steekproef van huidig beleid en investeringen, maar er is meer onderzoek nodig. We raden aan om te onderzoeken hoe onderzoek zoals de mijlpaal 'Indebted to Nature' van De Nederlandsche Bank kan worden gerepliceerd en toegepast.

- Meer duidelijke doelen en doelen: Bij gebrek aan een Parijs-doel voor natuur en een duidelijke methode om impact en afhankelijkheid van natuur te meten, zal het moeilijk blijven om impact te meten en te beoordelen. Wij adviseren actieve deelname en medewerking van de verzekeraars aan initiatieven als TNFD. Tot nu toe prevaleerde de belangstelling van (commerciële) banken. Verzekeraars worden uitgenodigd om zich bij deze initiatieven aan te sluiten, zowel met hun investeringen als met de mogelijkheden om te investeren in de natuur, bijvoorbeeld verkend door AXA in hun werk om risico's te verminderen door mangrovebescherming en -herstel. Over hoe verzekeringen op een kosteneffectieve manier kunnen helpen bij het beschermen en herstellen van deze unieke waardevolle ecosystemen in het Caribisch gebied.



Summary for the general public (English) – 2 pages

We have ten more years to bend the curve of biodiversity loss according to the WWF.⁷ Humanity must stop the pace of wildlife extinctions – or face extinction itself, according to a growing body of research. Wildlife support healthy ecosystems that we rely on. Keeping biodiverse ecosystems intact helps humans stay healthy. And biodiversity is an essential part of the solution to climate change.

Financial institutions are a key driver of financial risk. They have a societal responsibility to do no harm. Besides this biodiversity loss is a key driver of financial risks. It poses physical, reputational and transition risks to the financial sector. Bees are crucial for pollination services, but they don't work overtime. So a decline in animal pollinators can lead to lower yields. With roughly half of our global GDP highly or moderately dependent on nature – according to research by the World Economic Forum – this will make it harder for companies to repay loans.

Nature is moving from niche to norm. The 'Paris' moment for nature is underway with the pledge of over 50 countries to protect at least 30% of the world's land and oceans by 2030 and the postponed 15th meeting of the Conference of the Parties (COP 15) to the Convention on Biological Diversity (CBD) taking place later this year.

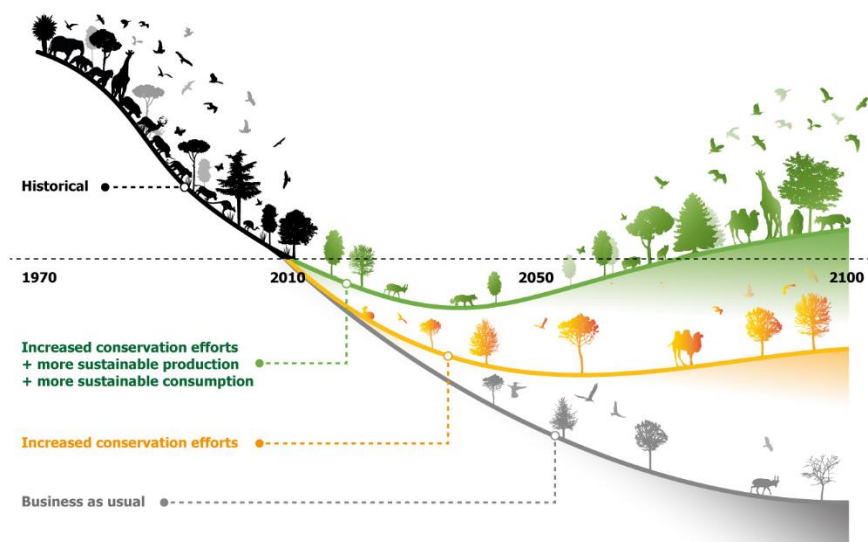


Figure 1: Bending the curve of biodiversity loss. Graphic from the Living Planet 2020 report.

Healthy societies, resilient economies and thriving businesses rely on nature. For many people in developing countries, biodiversity is key for livelihoods and resilience. Millions of people depend on forests for their livelihood. They are much more vulnerable for biodiversity loss than people in developed countries. It is no coincidence that both economy and ecology derive from the Greek word for house 'Oikos'. The World Economic Forum (WEF) Global Risk Report 2020 for the first time in the survey's 10-year outlook, considers the top five global risks in terms of likelihood are all environmental. The IPBES Global Assessment report in 2019 showed that an estimated 1 million species are at risk of extinction, most of them in the near future. The sharp decline of nature is driven mostly by human actions. We have ten more years to set the record straight and bend the curve of biodiversity decline, financial institutions play a key role in this transition. They need to commit to a shift from nature-negative to nature-positive, through for example financing of restoration and protection of nature.

But money also has a darker side. In 2019, the world's largest banks invested more than USD 2.6 trillion – or 5% of global GDP - in sectors that governments and scientists agree are the primary drivers of biodiversity destruction, such as food system and agricultural commodities, mining and mineral mining, fossil fuels, infrastructure, and tourism, according to research by Bankrolling Extinction.⁸ They can finance restoration and protection of nature via a number of financial vehicles, and help close the global biodiversity funding gap by developing innovative deals such as debt for nature swaps, or green bonds.

For a long time impact on biodiversity was a blind spot for financial institutions, who look at the world from their portfolio and not real-world impacts. If you look at a Bloomberg terminal – a software system used by many portfolio managers and brokers – there is still hardly any data on the impact of investments on nature. But there is light at the end of the tunnel. From the EU green deal to the postponed 15th meeting of the Conference of the Parties (COP 15) to the Convention on Biological Diversity (CBD) financial institutions realize that biodiversity loss may be the next system risk to be on the lookout for.

But are financial institutions doing enough now? On behalf of a group of NGOs Banktrack has called upon 55 banks to seek action ahead of the upcoming UN Biodiversity Conference in Kunming, China, to help protect biodiversity and safeguard the rights of Indigenous and local communities.⁹ They call upon among others to actively support and formally commit to the objectives and targets of the CBD and adopt methodologies to measure and report the impact of your investment and financing activities on biodiversity diversity.

About this study

On behalf of the FIG - The Fair Insurance Guide, founded in 2013, is part of the Fair Finance Guide, a partnership of Amnesty International, Milieudefensie, Oxfam Novib, PAX and World Animal Protection – in collaboration with IUCN National Committee of The Netherlands – we reviewed how the 9 largest insurance groups that are active on the Dutch market, integrate biodiversity in their policies, investments and to what extent they try to invest in nature-positive projects. The selected insurance groups are the 9 groups and included in the 2021 Eerlijke Verzekeringswijzer: Achmea, Aegon, Allianz, ASR, Athora Netherlands (previously known as Vivat), NN Group, CZ, Menzis and VGZ.

Results

This study found that ASR had the highest overall score in this research, with Achmea and Athora Netherlands on a shared second place. This means that based on our assessment these three organisations have the best overall score on the following components:

- Policy assessment
- Investment screening, engagement, voting, exclusion. Here we zoomed in on the 15 publicly listed companies in the cocoa, maize and salmon aquaculture value chain.
- Nature-positive investment

We concluded that NN Group and CZ make up the middle group, with Aegon, Allianz, Menzis and VGZ lagging. Almost all groups have committed to improving their biodiversity investment practices.

What can you do?

What has the biggest potential impact on nature? Eat less meat, install a bee hotel in your garden, consume fewer clothes or change your insurance policy?

If you care about nature, one of the most effective and impactful ways – but at the same time often forgotten- of supporting a shift from nature-negative towards nature-positive outcomes is by reviewing how your money is invested.

As a global network, we use a rigorous methodology to assess, report on, and campaign for more responsible investment policies & practices. By benchmarking the investment policies and practices of financial institutions in critical areas such as human rights and climate impact, we enable consumers and policy holders to demand more socially responsible, fair, and sustainable investments.

A key part of our Fair Finance work is our comprehensive and rigorous methodology. Developed by our network with policy research experts Profundo, and other stakeholders, the methodology is used to assessing Financial Institutions' approach to sustainability across 23 influential themes, including corruption, human rights, and climate change. By assessing the publicly available information on how Financial Institutions incorporate sustainability considerations into their operations, we can score them on social responsibility. This data forms the basis of constructive fact-based dialogue across the sector for more responsible and sustainable fiscal policies and practices.

The Fair Insurance Guide helps you in the following ways:

- Based on their score in the Fair Finance Guide, or as part of its case studies, such as the one you are reading now, you can decide if your insurer invests your money with both financial and non-financial metrics in mind that fit you.
- Based on their score you can decide to move to a different insurer, or ask them questions about their policies or investments.
- Based on their score you can keep your insurer accountable for its impacts. And you can send them a complaint.



Recommendation Fair Insurance Guide to Dutch insurers

Insurance companies are given the following recommendations:

- **Promote peer learning and collaboration among the sector.** The scores in this research vary considerably. This provides a starting point for cross-learning and collaboration. Existing platforms such as the agreement for international responsible investment in the insurance sector, and within the sector the Finance for Biodiversity Pledge could be a good starting point to foster collaboration.
- **Nature and climate are two sides of the same coin,** we cannot tackle the climate crisis without considering impact on nature and vis-versa. The sixth assessment report of the Intergovernmental Panel on Climate Change urges among other that *'climate change is causing dangerous and widespread disruption in nature'*¹⁰. In addition, understanding and awareness of the sector on the topic of climate can help within the organisation to create concerted action and improve uptake.
- **Without a clear destination, the success and impact of the insurers researched remains unclear.** What is needed are clear scenarios and targets that act as a compass for organisations to follow. Biodiversity needs to be included in both governance, strategy, risk and metric/targets setting within an organisation, to ensure coherent action created and clear roles for all are defined. This should include clear parameters for both engagement, and exclusion. Commitments by the sector are vague, hard to measure and difficult to communicate. To create a shift from nature-negative towards nature-positive more coherent and clear actions are needed, if otherwise their realizations would be a mere 'drop in the ocean'.
- **Insurers need to broaden their scope and include other sectors.** There is limited attention for the topic of biodiversity loss beyond high deforestation risk commodities such as palm oil and beef/soy.. Tool such as the ENCORE (Exploring Natural Capital Opportunities, Risks and Exposure)¹¹ - can be a starting point to better understand the impacts and dependency on nature. Within this space, monoculture as a key focus area seems to be completely missing from the risk and opportunity lens of the insurers.
- **The absence of an agreed definition of nature-positive limits both progress within the financial sector, and uptake and agreement with other stakeholders such as NGOs.** This definition should include the voice of all stakeholders, and take stock of existing work in this space, but should ensure that this links to a just transition. Action of the sector can only be ensured if there is convergence around common approaches and to deliver real results on the ground. Definitions should encourage a transition pathway that looks at the impact level of investments at portfolio level.
- **Financial risks are a too narrow lens to look at the world.** Financial institutions should look beyond risk at the world through a societal lens and consider how their work both impacts societies at large, and at the same time depend on them as well. Better understanding of this societal role is key to finding common understanding and solutions.

- **Transparency increases accountability of both insurance companies and investee companies towards their stakeholders and society.** Whilst acknowledging that not all information can be disclosed from a legal standpoint, more openness should be promoted and given where possible. Therefore, it is important that the insurers and the investee companies are transparent about salient issues c.q. biodiversity cases they are linked to and their responses to them. The insurers could improve transparency by publishing the details of each engagement with the companies, like the (interim) goals formulated, and the (interim) goals achieved. Transparency about prioritization is also important. If an insurer decides to take no action on the basis of a prioritization, it should indicate how it prioritized, what other controversies outweighed this one, and what it will do with the non-prioritised case. Insurance companies should also commit to always cooperate with legitimate research projects assessing their engagement efforts.
- **SMART goals can help promote uptake and understanding.** Overall, the insurance companies shared only limited evidence related to clear goals, timelines and intermediate steps on the selected cases. By not defining such variables in its engagement with investee companies, an insurance company runs the risk that the engagement becomes unguided, unrealistic, not measurable and unbound in time. Goals, timelines and intermediate steps are essential parameters which need to be monitored to ensure the credibility and success of an engagement process. The outcomes of this monitoring will determine if an insurance company should consider to try additional options to increase its leverage on the investee company, if objectives need to be adjusted or renewed or if exclusion or divestment need to be considered.



Recommendation Fair Insurance Guide to Dutch policy makers

Dutch policy makers are given the following recommendations:

- **Nature risk is a material risk to the stability of the Dutch financial system.**

The Network for Greening the Financial System recently released its statement on Nature-related Financial Risks.¹² It is recognizing that nature-related risks, including those concerned with biodiversity loss, can have major macroeconomic repercussions. In addition, they highlight how failure to account for, mitigate and adapt to these consequences is a source of global financial stability risks. The Dutch Central Bank and other supervisory bodies should treat nature-related risk the same way as other risks, and push Dutch financial institutions to take further action on the topic.

- **The Dutch government should spearhead efforts to create an ambitious targets to support a move from nature-negative towards nature-positive.** Almost 200 countries are due to adopt a global framework this year to safeguard nature by mid-century from the destruction wrought by humanity, with a key milestone of 30 percent protected by 2030. Although progress has been made towards finalising the post-2020 Global Biodiversity Framework more action is needed. The Global Biodiversity Framework will only be met with a new approach to biodiversity funding and a rethink of the huge sums spent on subsidies harmful to nature. The Dutch government should lead on this agenda on behalf of other parties and in collaboration with EU partners.
- **Include a financial sector lens in all relevant agreements.** The EU and Dutch government should consider a financial sector lens in all their work. For example on the new EU regulation on deforestation-free products now a focus is given to companies to ensure they are importing deforestation free products. Similar approaches should be applied to financial institutions, to ensure they do not provide finance to companies that are at risk of deforestation.

Abbreviations

CBD	<p>The Convention on Biological Diversity (CBD), known informally as the Biodiversity Convention, is a multilateral treaty. The convention has three main goals: the conservation of biological diversity (or biodiversity); the sustainable use of its components; and the fair and equitable sharing of benefits arising from genetic resources. Its objective is to develop national strategies for the conservation and sustainable use of biological diversity, and it is often seen as the key document regarding sustainable development.</p> <p>The convention was opened for signature at the Earth Summit in Rio de Janeiro on 5 June 1992 and entered into force on 29 December 1993. The United States is the only UN member state which has not ratified the convention. It has two supplementary agreements, the Cartagena Protocol and Nagoya Protocol.</p>
FFI	<p>Fair Finance International (FFI) is an international civil society network of over 100 CSO partners and allies, initiated by Oxfam, that seeks to strengthen the commitment of banks and other financial institutions to social, environmental and human rights standards.</p>
FIG	<p>The Fair Insurance Guide, founded in 2013, is part of the Fair Finance Guide, a partnership of Amnesty International, Milieudefensie, Oxfam Novib, PAX and World Animal Protection. At https://eerlijkegeldwijzer.nl/verzekeringswijzer/ everyone can check the scores of the see and compare insurers for their investment policy on fourteen social themes. This case study was developed in cooperation with IUCN Netherlands Comité.</p>
GBF	<p>The Secretariat of the UN Convention on Biological Diversity (CBD) has released the first draft of a new global biodiversity framework, to guide actions worldwide through 2030, to preserve and protect nature and its essential services to people. The Framework comprises 21 targets and 10 'milestones' proposed for 2030, en route to 'living in harmony with nature' by 2050.</p>
ICSR	<p>Running a company in accordance with international corporate social responsibility (ICSR) principles means taking the impact your business on man, the environment and society into account. ICSR affects areas such as working conditions, the environment, human rights and corruption. The OECD guidelines state what the 49 governments, including the Dutch, expect in terms of international corporate social responsibility.</p>
IPBES	<p>The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) is an intergovernmental organization established to improve the interface between science and policy on issues of biodiversity and ecosystem services. It is intended to serve a similar role to the Intergovernmental Panel on Climate Change.</p>
IUCN	<p>The International Union for Conservation of Nature is an international organization working in the field of nature conservation and sustainable use of natural resources. It is involved in data gathering and analysis, research, field projects, advocacy and education. IUCN's mission is to "influence, encourage and assist societies throughout the world to conserve nature and to ensure that any use of natural resources is equitable and ecologically sustainable".</p>

IUCN Red List	The International Union for Conservation of Nature (IUCN) Red List of Threatened Species (also known as the IUCN Red List or Red Data Book), founded in 1964, is the world's most comprehensive inventory of the global conservation status of biological species. It uses a set of precise criteria to evaluate the extinction risk of thousands of species and subspecies. These criteria are relevant to all species and all regions of the world. With its strong scientific base, the IUCN Red List is recognized as the most authoritative guide to the status of biological diversity. A series of Regional Red Lists are produced by countries or organizations, which assess the risk of extinction to species within a political management unit.
Finance for Biodiversity Pledge	The Finance for Biodiversity Pledge is a collective commitment by the finance sector itself. The pledge was established by a group of European financial institutions which have been working actively as members of the Finance and Biodiversity Community (F@B Community). Members commit themselves to making a positive contribution to biodiversity through their activities and investments and call upon world leaders to reverse nature loss this decade.
LPR	The Living Planet Report is published every 2 years by the World Wide Fund for Nature since 1998. It is based on the Living Planet Index and ecological footprint calculations. The Living Planet Report is the world's leading, science-based analysis, on the health of our planet and the impact of human activity. Humanity's demands exceed the Earth's capacity to sustain us.
WBCSD	The World Business Council for Sustainable Development (WBCSD) is a CEO-led organization of over 200 international companies. The Council is also connected to 60 national and regional business councils and partner organizations.
WEF	The World Economic Forum (WEF) is an international non-governmental and lobbying organisation based in Cologny, canton of Geneva, Switzerland. It was founded by German engineer and economist Klaus Schwab. The foundation, which is mostly funded by its 1,000 member companies – typically global enterprises with more than five billion US dollars in turnover – as well as public subsidies, views its mission as "improving the state of the world by engaging business, political, academic, and other leaders of society to shape global, regional, and industry agendas". The WEF is mostly known for its annual meeting at the end of January in Davos, a mountain resort in the eastern Alps region of Switzerland. The meeting brings together some 3,000 paying members and selected participants – among which are investors, business leaders, political leaders, economists, celebrities and journalists – for up to five days to discuss global issues across 500 sessions.
WWF	The World Wide Fund for Nature (WWF) is an international non-governmental organization founded in 1961, that works in the field of wilderness preservation and the reduction of human impact on the environment. WWF is the world's largest conservation organization, with over five million supporters worldwide, working in more than 100 countries and supporting around 3,000 conservation and environmental projects. They have invested over \$1 billion in more than 12,000 conservation initiatives since 1995.
PBAF	The Partnership for Biodiversity Accounting Financials (PBAF) is an independent foundation based in the Netherlands and a sister initiative of PCAF (the Partnership for Carbon Accounting Financials). PBAF's primary aim is to develop the 'PBAF Standard'.

<p>TNFD</p>	<p>The PBAF Standard enables financial institutions to assess and disclose the impact and dependencies on the biodiversity of loans and investments. PBAF provides practical guidance to financial institutions on biodiversity impact and dependency assessment and defines what is needed for these assessments (either or not conducted by data providers) to deliver the right information to financial institutions. With this information, financial institutions can effectively manage and report on biodiversity-related risks and opportunities and contribute to the conservation and sustainable use of biodiversity.</p> <p>The development of the Standard started in 2019 and is led and supported by a group of PBAF-partners and supporters, now totalling 30 financial institutions from 7 countries (February 2022).</p> <p>The Taskforce on Nature-related Financial Disclosures is a market-led, science-based and government-endorsed initiative to develop and deliver a risk management and disclosure framework for organisations to report and act on evolving nature-related risks, with the ultimate aim of supporting a shift in global financial flows away from nature-negative outcomes and toward nature-positive outcomes.</p> <p>At the centre of the alliance sits the Taskforce, a group of 34 individual Taskforce Members, which is led by the TNFD Co-Chairs. The Taskforce is supported by the TNFD Forum, a consultative grouping of over 300 institutional supporters. The Taskforce and Forum are managed and coordinated by the TNFD Secretariat, which also convenes and directs a TNFD Knowledge Hub of leading scientific organisations and standard-setting bodies. Finally, a Stewardship Council represents the founders and funders of the TNFD.</p> <p>In March 2022, TNFD released the first beta version of the framework for market consultation. The release marked the beginning of an 18-month process of consultation and development together with a broad range of market players and stakeholders.</p>
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Definitions

Definition	Description	Source
Biodiversity (or biological diversity)	The diversity of life in all its forms – the diversity of species, genetic variations within one species, and ecosystems.	UN CBD, 1992
Biodiversity-related financial risks	Financial risks to organisations and the wider financial system resulting from biodiversity loss and ecosystem degradation due to human activity that drives nature loss. This includes physical, transition and liability risk types, aligned to the TCFD.	Adapted from: The Economics of Biodiversity: Dasgupta Review
Ecosystem	A dynamic complex of plants, animals, and microorganisms, and their non-living environment, interacting as a functional unit (e.g. deserts, coral reefs, wetlands, and rainforests).	Millennium Ecosystem Assessment (MEA), 2005
Ecosystem Services	The stocks and flows of benefits that ecosystems make to people (e.g. timber, fibre, pollination, water regulation, climate regulation, recreation, mental health), enable human activities which, include the operation of businesses.	Adapted from: Natural Capital Protocol
Impacts & Dependencies	Through inputs to production, risk reduction, impact mitigation, and by supporting life more generally, ecosystem services underpin all economic activity. Any adverse changes in natural capital, therefore, have a potentially negative effect on the businesses that depend on it. This includes dependencies of the economy on natural capital and the impacts such as pollution and waste, which can impair the resilience of natural capital.	Exploring natural capital opportunities risk and opportunities: A practical guide for financial institutions
Monoculture (farming)	The practice of growing only one type of crop on a certain area of land	Oxford Dictionary
Nature	“Nature’ to the natural world with an emphasis on the diversity of living organisms and their interactions among themselves and with their environment. As opposed to humans or human creations. A construct of four realms – Land, Ocean, Freshwater and Atmosphere. These provide an entry point for understanding how organisations and people depend on and impact natural capital.	Updated from IPBES and TNFD draft framework
Nature-related risks	The potential threats posed to an organisation are linked to its and other organisations’ dependencies on nature and nature impacts. These can derive from physical, transition and systemic risks. In addition to shorter-term financial risks (deemed material today), the TNFD’s definition of nature-related risks includes longer-term risks presented by nature-related dependencies and nature impacts	TNFD draft framework
Nature-positive	A world with a net positive state of nature by 2030, and full recovery of nature by 2050.	Adapted from: SBTN and Nature+Positive



Introduction



If we all get together, we can truly make a difference, but we must act now, The window of time is closing. -Jane Goodall, English primatologist and anthropologist

The IPBES Global Assessment report in 2019 showed that an estimated 1 million species are at risk of extinction, most of them in the near future.¹³ This message was reiterated by the WWF Living Planet Report 2020 -LPR - which showed an average 68% decrease in population sizes of mammals, birds, amphibians, reptiles and fish between 1970 and 2016, a lifetime for many of us.¹⁴

According to the officially adopted definition by the Convention on Biological Diversity, biodiversity is *“the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.”* This means that biodiversity is the part of nature that is alive and includes every living thing on Earth. Nature is all the existing systems created at the same time as the Earth, all the features, forces and processes, such as the weather, the sea and mountains.

Healthy societies, resilient economies and thriving businesses rely on nature. The sharp decline of nature is driven mostly by human actions. The LPR calls for an integrated strategy to bend the curve of terrestrial biodiversity and transformational changes made to the way we produce and consume food. Changes needed include making food production and trade more efficient and ecologically sustainable, reducing waste, and favouring healthier and more environmentally-friendly diets.

Role of insurers as providers of finance

Increasingly attention is given to the role that financial institutions can make in supporting a shift in global financial flows away from nature-negative outcomes and toward nature-positive outcomes. The global insurance industry is exposed to nature-related risks through the investments it makes, and the insurance it provides to non-financial companies and activities that directly depend on various ecosystem services for their businesses. In this study, we explore the impacts made by insurers active on the Dutch market through their investments, and how investing in nature can provide opportunities.

Blind spot

Impact on nature is a material risk to financial institutions. Research from the World Economic Forum shows that US\$ 44 trillion of global GDP—around half—is highly or moderately dependent on nature.¹⁵ Although some may argue that we cannot or should not put a price tag on nature, overwhelming evidence shows that the loss of nature is a huge risk to our human societies. Recent research from the World Bank shows that by a conservative estimate collapse in select services such as wild pollination, provision of food from marine fisheries and timber from native forests, could result in a significant decline in global GDP: \$2.7 trillion in 2030. This is around 2.3 per cent of global GDP annually by 2030 and some of the poorer countries would be hit hardest.¹⁶

Closing the biodiversity funding gap

Exploratory research by the Paulson Institute, The Nature Conservancy, and the Cornell Atkinson Center for Sustainability at Cornell University puts the biodiversity financing gap at an average of US\$ 711 billion or between US\$ 598-824 billion per year.¹⁷ If we want to close this gap the financial institutions, including insurance, need to stop investing in projects, industries and companies that have a detrimental impact on nature. And need to support and foster innovative finance mechanisms to finance the new biodiversity targets and our common future. This change will not be overnight. Collaborative and coherent action is needed to bend the curve in biodiversity decline.

The global insurance industry has already started assessing climate change-related financial risks through various tools and modelling techniques. These tools and models, however, do not incorporate deterioration of other forms of natural capital, ecosystem services and biodiversity. Keeping in mind that, biodiversity is often a source of livelihood and resilience for communities in developing countries. Biodiversity degradation will hit them much harder than in developed countries. As this is not included in current risk frameworks, the risks are not effectively measured, managed or improved. The insurance regulators and supervisors also need to understand and respond to the insurance risks and the threats to financial stability that nature-related risks can pose. This study links to both actions by 9 insurance groups with activities on the Dutch insurance market and the government/ regulator.

Some organisations in the sector, have been taking steps such as the French multinational insurance company AXA together with WWF have been exploring this for biodiversity as well, through ground breaking reports such as 'Into the Wild'. This report called for integrating nature into investment strategies" and was designed to raise awareness on biodiversity loss and its economic and financial impacts. It proposed to view the biodiversity challenge as a natural extension of climate efforts.¹⁸ Their actions have received some criticism from Reclaim Finance, Canopée Forêts Vivantes, SumOfUs and Mighty Earth who continue to call on the insurance giant to raise its ambition.

This study links to the work of various initiatives that have sprung in the wake of the postponed 15th meeting of the Conference of the Parties (COP 15) to the Convention on Biological Diversity (CBD), such as the Taskforce on Nature-Related Financial Disclosures (TNFD), the Finance for Biodiversity pledge and the Partnership Biodiversity Accounting Financials (PBAF).

Food as a high impact, high dependency sector

The existing food production systems are one of the key drivers of biodiversity loss, climate change and pollution. We are currently overstepping 2 of the 9 planetary boundaries – defined as a safe space where humanity can continue to develop and thrive for generations to come¹⁹. Agriculture is responsible for the conversion of 80% of natural land globally²⁰, with more than 60% of tropical deforestation driven by cattle ranching, soy and palm-oil production.²¹

Food products are also impacting other natural resources, for example, it is expected to be used 70% of the earth's freshwater sources²². The impacts are not limited to terrestrial only, with overfishing a third of all fish stocks²³. Agriculture also emits more than a quarter of global greenhouse-gas (GHG) emissions,²⁴ The agriculture sector is the largest user of plastics, with an estimated 8 million tons of plastic ending up in oceans every year, according to the International Union for Conservation of Nature. Scientists believe these uses and emissions significantly contribute to species' disappearance.²⁵

Within our current food system, animal-based foods are typically more resource-intensive and environmentally impactful to produce than plant-based foods. Production of animal-based foods accounted for more than three-quarters of global agricultural land use and around two-thirds of agriculture's production-related greenhouse gas emissions in 2009, while only contributing 37 percent of total protein consumed by people in that year. Because many animal-based foods rely on crops for feed, increased demand for animal-based foods widens the food gap relative to increased demand for plant-based foods.²⁶

The only way to overcome this triple challenge – climate, nature and pollution, is through nature-friendly and climate-friendly food production systems that support and enhance biodiversity and reduce carbon emissions. Ensuring food security, conserving biodiversity, reducing carbon emissions and building climate resilience are needed. This requires a holistic approach.

The Global Biodiversity Framework - GBF - which is expected to be agreed under the Convention on Biological Diversity (CBD) in the second half of 2022, expects to aim to dramatically lower these adverse impacts. The post-2020 draft biodiversity framework seeks to ensure that *"all areas under agriculture, aquaculture and forestry are managed sustainably."* This includes specific targets, such as the halving of nutrients lost (e.g., fertilizer and animal manure), reduction of pesticide use by two-thirds and complete elimination of plastic-waste discharges by 2030.

Is the food sector ready for such change? So far, it does not appear to be. For example, less than a third of food-product companies in the MSCI ACWI Investable Market Index (IMI)²⁷ had implemented programs with their agricultural value chain to reduce their greenhouse gas -GHG 0 emissions or use of freshwater and chemical inputs (e.g., fertilizer and pesticide). Also, only a small proportion of these companies have committed to cutting their use of virgin plastic, as of Nov. 30, 2021.

Food system change

According to the IPBES Global Assessment report, direct drivers of biodiversity loss include land/sea use change, direct exploitation, and invasive species. These impacts are all directly linked to our current food system which focuses on capital intensive and mono-cropping. According to research by Biodiversity International and CGIAR the world's food supply depends on about 150 plant species. Of those 150, just 12 provide three-quarters of the world's food. More than half of the world's food energy comes from a limited number of varieties of three "mega-crops": rice, wheat, and maize.

Modern agriculture is concentrated on a small number of varieties designed for intensive farming. This has dramatically reduced the diversity of plants available for research and development. This trend, and the increasing industrialization of agriculture, are key factors in what is known as "genetic erosion." It is vital to ensure the continued genetic diversity of these major crops to avoid vulnerability to diseases that could affect production worldwide.

With the world on track for an average temperature increase of more than 1.5 °C and the population burgeoning toward 10 billion by 2050, farmers need new tools to meet increasing food demand and adapt to climate change. Some of those tools may be hidden in the biodiversity of crops themselves, or their wild relatives, as some species and cultivars have genes that confer tolerance to climatic stress or disease resistance that crop breeders can use to develop more robust, resilient varieties.²⁸

The looming threat of extinction from climate change makes the lack of diversity in the world's food supplies a dangerous prospect. The overreliance on too few varieties and species is leaving the food system unnecessarily exposed to shocks and stresses, as well as neglecting a high-impact solution to major health, environmental and food security challenges.

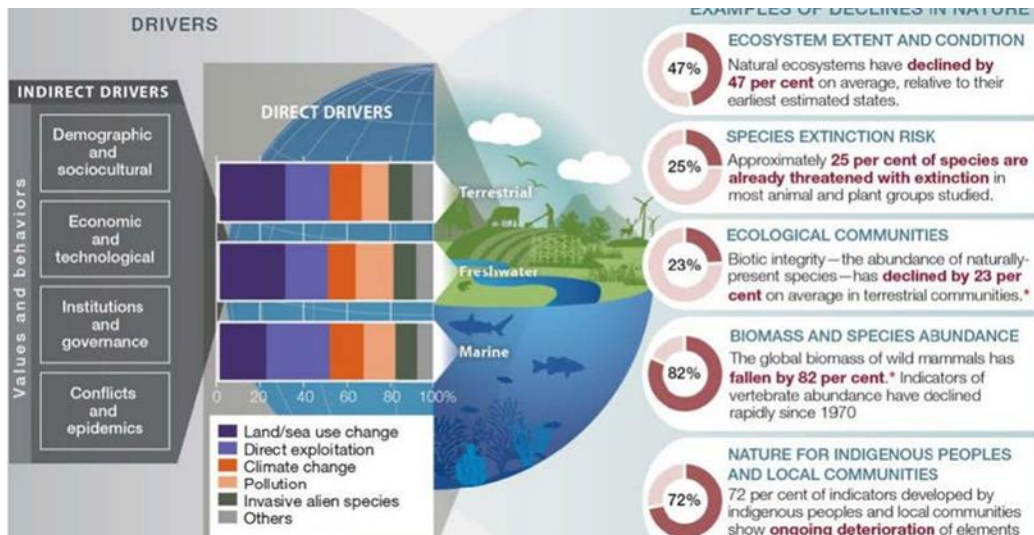


Figure 2: IPBES Global Assessment report

'Without reform of our food system, biodiversity loss will continue to accelerate. Further destruction of ecosystems and habitats will threaten our ability to sustain human populations. Reform will rely on the use of three principal levers: Firstly, global dietary patterns need to converge around diets based more on plants, owing to the disproportionate impact of animal farming on biodiversity, land use and the environment. Secondly, more land needs to be protected and set aside for nature. (...) Thirdly, we need to farm in a more nature-friendly, biodiversity-supporting way, limiting the use of inputs and replacing monoculture with polyculture farming practices.'

A recent publication from Chatham House shows the importance of the transformation of the current food system to support biodiversity. Currently, financial institutions and consumers have become increasingly aware of the negative impact of soy, beef and palm oil. However, less attention is given to how we can improve current practices of food production, how to make sustainable improvements and how to create a systems change. Instead of focusing on a few high-impact crops attention should be given to how the current food system undermines small-scale food producers in the global South and creates a capital intensive industry, how our reliance on a few crops is a threat to global stability and how financial institutions like the global insurance industry should be made more aware of the material risk investing in mono-cropping is to their bottom-line.





Methodology

This chapter describes the methodology for this research. It first describes the background of the research. The following section provides information about the design of the research including the selected insurance companies analysed, the selected companies, and the types of methodologies used. The two last sections describe the scoring methodology and a disclaimer is given.

Background research

The global insurance industry is exposed to nature-related risks through the investments it makes, and the insurance it provides to non-financial companies and activities that directly depend on various ecosystem services for their businesses. In this study, we explore the impacts made by the nine largest insurance companies on the Dutch market through their investments and we explore the insurance component under the component investing in nature. This section describes the background of this research.

The selected insurance groups are the nine groups that are active on the Dutch market and that are included in the 2021 Eerlijke Verzekeringwijzer: Achmea, Aegon, Allianz, ASR, Athora Netherlands (previously known as Vivat), NN Group, CZ, Menzis and VGZ. Please note that since this research has started eight new insurers have joined the Fair Insurance Guide - Klaverblad, Univé, ONVZ, De Goudse, ZLM, Unigarant (ANWB), Zorg en Zekerheid, en DSW – they have not been included in this research.

The score on this methodology consists of three components, which are further subdivided under investments:



POLICY (20%)



INVESTMENTS (60%)



NATURE-POSITIVE
INVESTMENTS (20%)

Research design

The investment policies of the insurers were checked (at group level) for investment criteria on biodiversity. The following elements on biodiversity are crucial for a policy regarding the companies a financial institution invests in or finances. These elements were derived from the Fair Finance Guide International methodology themes Nature and Food and are used to regularly assess the policies of financial institutions. Elements 1, 2 and 5 are added to this research, because of the focus on biodiversity:

1. Companies contribute to an ambitious, time-bound shift from monoculture plantations to a transformation in the food system, for example via polyculture farming.
2. Companies actively invest in the restoration of vulnerable biodiversity.

3. Companies prevent negative impacts on High Conservation Value (HCV) areas within their business operations and the areas they manage.
4. Companies prevent negative impacts on protected areas that fall under the categories I-IV of the International Union for Conservation of Nature (IUCN) within their business operations and the areas they manage.
- 5. Companies prevent negative impacts on protected areas that fall under the category V-VI of the International Union for Conservation of Nature (IUCN) within their business operations and the areas they manage.**
6. Companies prevent negative impacts on UNESCO World Heritage sites within their business operations and the areas they manage.
7. Companies prevent negative impacts on protected areas that fall under the Ramsar Convention on Wetlands within their business operations and the areas they manage.
8. Companies prevent negative impacts for the species populations that are on the IUCN Red List of Threatened Species.
9. Companies prevent the introduction of invasive alien species in ecosystems.
10. Companies minimize use of water.
11. Companies conduct water scarcity impact assessments in water scarce regions.
12. Companies have comprehensive mitigation measures in place to address community and ecosystem water requirements in areas where environmental impact assessments identify that significant impacts to water resources are likely.
13. Companies prevent water pollution.
14. Companies make an environmental impact assessment of the total consequences of a large scale project on biodiversity, at least according to GRI 304: Biodiversity 2016 or other relevant standards.
15. Conversion of peatland and high-carbon stocks for agricultural development is unacceptable.
16. Companies contribute to an ambitious, time-bound shift from animal protein to plant and alternative proteins to decrease animal protein consumption.
17. Companies minimize the use of pesticides.
18. Companies integrate criteria on nature into their procurement and operational policies.
19. Companies include clauses on the compliance with criteria on nature in their contracts with subcontractors and suppliers.

The researchers used the assessment of the latest policy assessment of the Fair Insurance Guide as the starting point.

Company selection

For this study a total of 15 publicly listed companies in the cocoa, maize and salmon aquaculture value chain were selected- see annex I. At the request of the insurers, we have limited our list to 15 which provides a small but representative sample, drawn from different industries, operating both up and downstream. The value chain consists of (from upstream to downstream) growers, suppliers of agricultural products like pesticides, traders, food and consumer food producers, retailers. Some companies are active in more than one of these sectors. The selection criteria were:

- Company revenues;
- The use of monocultures in the company's value chain;
- The company is (or has been) involved in biodiversity controversies; and
- A quick scan reveals financial relationships between the company and at least one but preferably several of the selected financial institutions. However, if all insurers have explicitly excluded a company, the company can still be selected, because it would be interesting to assess how the exclusion process works.

The selection process resulted in the following list of 15 companies:

- Maize: ADM, MHP, Long Ping High-Tech, Tyson Foods;
- Salmon: Mowi, Lerøy Seafood Group, Multiexport, Grieg Seafood, Aqua Chile;
- Cocoa: Mondelez International, Nestle, Hershey, Lindt/Spruengli, Meiji Co.
- Retail: Walmart.

For the 15 selected companies an external research agency – Profundo – carried out the research for the financial links (shares and bonds) with the insurers. The insurers were assessed at the group level.

Survey

The next step in the research was the survey. Each insurer was invited to assess the implementation of their responsible investment policy. The survey was broken down into four topics and scoring percentages

For each sector (cocoa, maize, salmon) a separate set of questions was asked. The survey questions and the scoring model are described in the next section.

The survey was filled in by the research team based on publicly available information and was shared with the insurers for their review and to correct potential missing information twice. Some of the insurers actively engaged in this process, and provided missing information or answered queries, which improved the accurateness of the assessment made. Other insurers decided not to participate in this process, in which case their score was based on the review from the research team.

Nature-positive investments

In addition to questions about the investments of the insurers in the 15 selected companies (that are focused on do-no-harm principles), the insurers were asked to provide examples of nature-positive investments, to highlight and stimulate the do-good impact that investments in the cocoa, maize and salmon sector can have. The insurers were asked to provide evidence for the positive impact on biodiversity and the absence of severe negative impacts of the investment. Nature-positive investments are included in the scoring model – see the next section for more details. The focus on the potential opportunity side of investments was made at the request of the insurers, who looked for a way to capture both negative and positive impacts of investments where possible.

At this moment there is no agreed standard definition of nature-positive investments. In their most recent meeting, the G7 leaders announced that *“our world must not only become net-zero but also nature positive, for the benefit of both people and the planet.”* But how to apply this in practice? Keeping in mind that unlike in the climate space where GHG emissions have fluctuated historically, species cannot effectively be brought to life. So how do we measure our net impact on biodiversity, and how can we ensure that we leave nature in a better state than we have found it, as the nature-positive commitment proclaims?

We see that this is a space that is under a lot of development now. We expect this to continue at least in the next few months due to the expected close of the negotiations and the defining of the Post-2020 Global Biodiversity Framework (GBF), which includes a proposed quantitative target now of ‘zero loss of nature from 2020 onwards, nature-positive by 2030, and full recovery by 2050’. Until now, the translation was made mostly for a corporate audience, with the World Business Council on Sustainable Development (WBCSD) late 2021 releasing of a new practitioner guide that introduces six building blocks to help businesses to understand what nature-positive means and link it with relevant frameworks and tools to adopt.²⁹ We also see the work of the Science Based Targets Network (SBTN) which, among others, calls for actionable targets that capture nature’s complexity and connectivity from genes to ecosystems.³⁰

In the context of this study, we reviewed nature-positive investments supporting a shift from nature-negative towards nature-positive. This includes, but is not limited to, principles and actions that reduce and simplify food value chains. An examples of this is 'eating low in the food chain' which includes the transition towards plant based protein, investments in alternatives for animal protein (that are produced without using GMO, or animal products) and the production and promotion of local/regional food. This means for example, that investments in vegetable protein should be combined with a measurable reduction of animal protein.

The research results in a score of between 1 and 10. The score consists of three subsets. Below a short description for each subset is given.

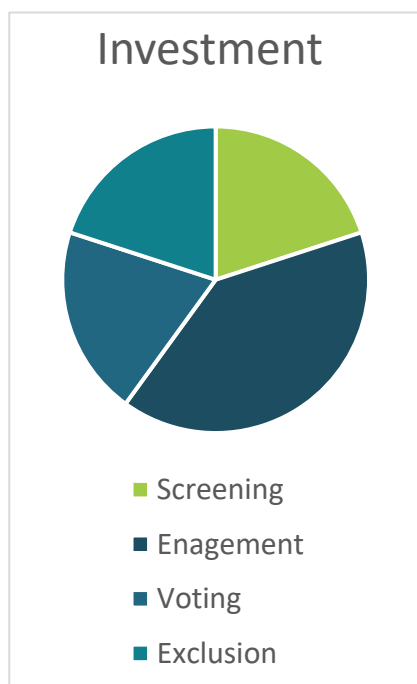
Policy assessment (20% of total score)

For the policy assessment (20% of the total score), the scoring system of the Fair Finance Guide International is copied. See section 1.4.4 of the FFGI methodology:

<https://fairfinanceguide.org/media/497246/ffg-policy-assessment-methodology-2021.pdf>

Investments (60% of total score)

For the scoring of the investments (60% of the total score), the following scoring system is applied:



- If no investments in the 15 selected companies are identified, the score 'not applicable' is given;
- If no investments in the 15 selected companies are identified, AND the insurer proves that this is because of its responsible investment policies, full points will be awarded for the relevant indicators
- If investments in any of the 15 selected companies are identified, the score of the insurer is based on the answers to the survey.

Within this, a further division was made. The survey addressed:

- Screening (20% of the score for investments) practices of the insurer.
- Engagement (40% of the score for investments) practices of the insurer.
- Voting (20% of the score for investments) practices of the insurer.
- Exclusion (20% of the score for investments) practices of the insurer.

This scoring was discussed and updated based on the suggestions of the insurers.

We understand that insurers do not engage with all relevant companies. To score a 6 ("sufficient") for the engagement section, it will not be necessary to engage with all relevant companies. However, the FIG wants to reward insurers that do engage with all relevant companies. To have a perfect score of 10, it is necessary to engage with all relevant companies. This means that:


- Insurers are requested to provide the researchers with evidence of their responsible investment practices. If required by the insurer, the researchers will treat the evidence confidentially (check – by the project team).

- There is no minimum threshold in the number of investments in a selected company. Previous case studies have shown that insurers can and do engage with companies where they have minor investments. This is also in line with the expectations of the OECD Guidelines for Multinational Enterprises, as the Dutch OECD National Contact Point has ruled that a minority shareholding in a company still creates a responsibility for the investor to act: *“This means that investors and other financial institutions have a responsibility to exert influence where possible on companies they invest in to help prevent or mitigate possible adverse impacts of these companies’ operations”*.


The questionnaire consists of the following questions. The second column details the rationale for the indicator and the third column shows the scoring guidance.

SMMARTT Methodology


Indicators on engagement (40% of total investment score), following the SMMARTT methodology – specific, measurable, multi-stakeholder, achievable, realistic, time-bound and transparent:




SPECIFIC




MEASURABLE




MULTI-
STAKEHOLDER




ACHIEVABLE



REALISTIC



TIME-BOUND



TRANSPARENT

Table 3 Questionnaire investments

	Indicators on screening (20% of total investment score)	Rationale for the indicator	Scoring guidance
1.	<p>The insurer screens its investment portfolio on biodiversity issues, as defined in the investment criteria on biodiversity in this study (see the section on investment policies).</p>	<p>This indicator measures the scope of the implementation of the screening process. It measures if the insurance company has effective instruments in place, to enable proper identification of biodiversity risks among investee companies, also taking into consideration the type of asset class.</p>	<p>Never (0 points) The screening is applied only to a limited part of its investments in corporate shares and bonds (1 point) The screening is applied to all its investments in corporate shares and bonds whatever the active or passive investment strategy (3 points)</p>
2.	<p>The insurer's screening process has identified how its investees act on the 7 biodiversity issues in the corn, salmon and cocoa sectors.</p> <p>Corn (5): use of monocultures, deforestation/conversion of natural areas, pesticides use, water use, soil degradation.</p> <p>Cocoa (4): use of monocultures, deforestation/conversion of natural areas, pesticides use, soil degradation.</p> <p>Salmon (5): use of monocultures, deforestation/conversion of natural areas, water pollution, pesticides use, antibiotics use.</p>	<p>This indicator measures the outcome of the screening process: is the screening process sufficient to identify sustainability issues at the investee? This indicator sets up an expectation from insurance companies to have systems in place enabling a continuous identification of biodiversity impacts amongst their investee companies.</p>	<p>No (0 points) Yes, at least one selected issue for at least one of the selected investees (1 point) Yes, at least one selected issue for all the selected investees (2 points) Yes, all selected issues for all the selected investees (3 points)</p>
	<p>Indicators on engagement (40% of total investment score), following the SMMARTT methodology – specific, measurable, multi-stakeholder, achievable, realistic, time-bound and transparent:</p>	<p>The rationale for the indicator</p>	<p>Scoring guidance</p>
3.	<p>Specific: As a part of its engagement goals, the insurer has required concrete intermediary steps (for example in the form of an action plan) from the investee company.</p>	<p>Intermediate steps are essential parameters that need to be monitored to ensure the credibility and success of an engagement process.</p>	<p>Never (0 points) The insurer provides examples for at least one, but less than half of the relevant selected cases (2 points) The insurer provides examples for half or more of the relevant selected cases (3 points) The insurer provides examples for all of the relevant selected cases (4 points)</p>

4.	<p>Measurable: The insurer monitors the company's progress on the implementation of the concrete steps the company has committed itself to and the achievement of engagement goals.</p>	<p>Goals, timelines and intermediate steps are essential parameters that need to be monitored to ensure the credibility and success of an engagement process. The insurance company's role as the monitor of the investee company's concrete steps to address the biodiversity impacts is central. The outcomes of this monitoring will determine if an insurance company should consider trying additional options to increase its leverage on the investee company, if objectives need to be adjusted or renewed or if exclusion or divestment need to be considered.</p>	<p>Never (0 points) The insurer provides examples for at least one, but less than half of the relevant selected cases (2 points) The insurer provides examples for half or more of the relevant selected cases (3 points) The insurer provides examples for all of the relevant selected cases (4 points)</p>
5.	<p>Multi-stakeholder: The insurer demonstrates that it required that the company follows a multi-stakeholder approach before finalising the action plan.</p>	<p>Multi-stakeholder engagement is an important means of implementing due diligence. Stakeholders can provide important knowledge to help identify potential or actual impacts on themselves or their surroundings. The values and priorities of impacted stakeholders are vital considerations in evaluating impacts and identifying appropriate avoidance or mitigation steps.³¹</p>	<p>Never (0 points) The insurer provides examples for at least one, but less than half of the relevant selected cases (2 points) The insurer provides examples for half or more of the relevant selected cases (3 points) The insurer provides examples for all of the relevant selected cases (4 points)</p>
6.	<p>Achievable: The insurer has formulated written goals to be achieved in the engagement process.</p>	<p>Without specific and written goals, the engagement process runs a risk to become unguided, unrealistic, not measurable and unbound in time.</p>	<p>Never (0 points) The insurer provides examples for at least one, but less than half of the relevant selected cases (2 points) The insurer provides examples for half or more of the relevant selected cases (3 points) The insurer provides examples for all of the relevant selected cases (4 points)</p>
7.	<p>Realistic: The insurer explains the main features of its engagement strategy.</p>	<p>The insurer should describe the main activities that compose its engagement strategy.</p>	<p>Never (0 points) The insurer provides examples for at least one, but less than half of the relevant selected cases (2 points) The insurer provides examples for half or more of the relevant selected cases (3 points) The insurer provides examples for all of the relevant selected cases (4 points)</p>

8.	Timebound: The insurer has set timelines for its engagement activities and goals to be achieved.	Goals, timelines and intermediate steps are essential parameters that need to be monitored to ensure the credibility and success of an engagement process. The insurance company's role as the monitor of the investee company's concrete steps to address the biodiversity impacts is central. The outcomes of this monitoring will determine if an insurance company should consider trying additional options to increase its leverage on the investee company, if objectives need to be adjusted or renewed or if exclusion or divestment need to be considered.	Never (0 points) The insurer provides examples for at least one, but less than half of the relevant selected cases (2 points) The insurer provides examples for half or more of the relevant selected cases (3 points) The insurer provides examples for all of the relevant selected cases (4 points)
9.	Transparent: The insurer ensures transparency by disclosing the names of the companies it has formally engaged.	Transparency is important for a number of reasons. First, it makes public accountability possible. Second, it helps adversely impacted individuals and communities to follow the actions of the insurance company and the investee company. And third, it makes it possible for investors and consumers of the insurance company (and the investee company) to follow its action towards a specific incident. As such, the insurance company must publish both its general procedures and as much relevant information regarding specific abuses as possible. To account for how the insurance company has addressed the biodiversity impact, including the incidents in this report, the insurance company publishes, when available: The names of companies with which it has formally engaged.	No reporting (0 points) At least one, but less than half of the engagement cases are mentioned (2 points) Half or more of the engagement cases are mentioned (3 points) All engagement cases are reported (4 points)
10.	Transparent: The insurer ensures transparency by publishing formal (intermediate and final) decisions on concluding or continuing the engagement with specific companies, including the investee companies that form part of this research.	See element 9. In order to account for how the insurance company has addressed the biodiversity impact, including the incidents in this report, the insurance company publishes, when available: Formal (intermediate and final) decisions on concluding or continuing the engagement with specific companies, including the investee companies that form part of this research.	No reporting (0 points) At least one, but less than half of the engagement cases are mentioned (2 points) Half or more of the engagement cases are mentioned (3 points) All engagement cases are reported (4 points)

11.	<p>Transparent: The insurer ensures transparency by publishing results of the (intermediate and final) engagement process with specific companies, including the investee companies that form part of this study.</p>	<p>See element 9. In order to account for how the insurance company has addressed the biodiversity impact, including the incidents in this report, the insurance company publishes, when available: Results of the (intermediate and final) engagement processes with specific companies, including the investee companies that form part of this study.</p>	<p>No reporting (0 points) At least one, but less than half of the engagement cases are mentioned (2 points) Half or more of the engagement cases are mentioned (3 points) All engagement cases are reported (4 points)</p>
<p>Indicators on voting (20% of total investment score)</p>	<p>The rationale for the indicator</p>	<p>Scoring guidance</p>	
12.	<p>At a general shareholders meeting, the insurer has filed a resolution or voted in favour of a resolution that aimed to address the companies' impact on biodiversity.</p>	<p>Voting at general shareholder meetings gives investors the right and opportunity to make their views known to company management and directors on significant issues that affect the value of the shareholding. This includes the biodiversity impact of the company.</p>	<p>No (0 points) Yes, once (2 points) Yes, more than once (3 points)</p>
<p>Indicators on exclusion (20% of total investment score)</p>	<p>The rationale for the indicator</p>	<p>Scoring guidance</p>	

13.	<p>If the engagement goals are not met, the insurer has tried different options to increase its leverage to address the biodiversity controversies or in case of persisting unsuccessful engagement, has decided to suspend or end the business relationship</p>	<p>If the engagement goals are not fully met, but the insurance company sees sufficient reason(s) to continue engagement instead of ending the relationship, the insurance company exerts additional forms of leverage to mitigate the biodiversity risks³², for example</p> <ul style="list-style-type: none"> • Attending and speaking at the Annual General Meetings to express views on the biodiversity impact; • Collaboration with other investors to increase leverage on the biodiversity impacts (for instance within the PRI network); • Engagement with regulators and policymakers on the biodiversity impact; • Joining geographic or issue-specific initiatives that seek to prevent and mitigate the biodiversity impact in the areas identified; • Reduction of the investment position and communicating the reason for the reduction; • Increase intensity of engagement actions if the company does not respond positively in the first instance; • For active strategies, temporary divestment while pursuing mitigation efforts; • For active strategies, divestment either after failed attempts at mitigation or where the investor deems mitigation not feasible or due to the severity of the biodiversity impact; or • For passive strategies, where possible and in compliance with regulatory obligations, redesign of investment strategy to avoid investments with highly severe impacts (e.g. exiting a passive index and investing in an adjusted or tailored index which excludes severe risks identified by the investor). 	<p>Never (0 points) Incidentally: ad-hoc examples (2 points) Frequently: shows sufficient evidence (3 points) Systematically: evidence for all the relevant selected cases (4 points)</p>
14.	<p>Companies covered by this research have already been excluded for ESG issues before the period investigated in the financial research (2019-2021)</p>	<p>Since the assessment of each insurance company is done only on the selected companies for which financial relationships have been found (over the period 2019-2021), exclusions of companies by the insurers because of ESG reasons before the time period of this research are assessed by this indicator. Points are granted if the insurer excluded one of the selected companies for ESG reasons before the time period of this research</p>	<p>No (0 points) Yes (2 points)</p>

Nature-positive investments (20% of total score)

The insurers were asked in the survey to provide evidence for the positive impact on biodiversity and the absence of severe negative impacts of investments in any of the three sectors: cocoa, maize, salmon aquaculture (20% of the total score). The amount of investment was not relevant for the scoring. The following investments could be awarded points IF the insurer provides evidence of the positive impact on biodiversity and the absence of severe negative impacts of the investment:

- Investments that contribute to a SMART transition from monoculture plantations to sustainably managed food systems via for example polyculture and agroforestry farming;
- Investments that protect and restore vulnerable biodiversity;
- Investments that contribute to an ambitious, time-bound shift from animal protein to plant and alternative proteins to decrease animal protein consumption. For example, by following the agriculture criteria of the Climate Bonds Initiative, which lay out the requirements that agriculture assets and/or projects must meet to be eligible for inclusion in a Certified Climate Bond.³³

Insurers were asked to provide evidence of nature-positive impact and for their due diligence for up to four investments that fit within this category. For each investment, 25% of the nature-positive score can be awarded. This will add up to the nature-positive score (20% of the total score). This is in line with the preferences of insurers who expressed that the FIG should pay more attention to positive investments.

The researchers did a quick controversy scan on the investments suggested by the insurers.

Bonus Point

In addition, an insurer was able to score 1 bonus point if it committed to a concrete improvement in its policy, investments or nature-positive investments over the next year. The researchers reviewed and decided if a commitment was credible and fits within the topic of this study. The conditions for awarding a bonus point are:

- The commitment has to be confirmed by the insurer in writing: by email or by answering the questionnaire;
- The commitment will be published by the Fair Insurance Guide;
- It is not possible to score more than 1 bonus point;
- The action committed to will have to start in the 12 months after the commitment was made.

The following criteria lead to a bonus point:

- In case of a policy commitment the insurer confirms that:
 - it will include one or more extra assessment elements in its next policy update; OR
 - it will develop a new biodiversity investment policy; OR
 - it will widen the scope of its policy to cover more assets.
- In case of a commitment on actual investments the insurer confirms that:
 - it will start a time-bound engagement process with one of the selected companies; OR
 - it will start a time-bound engagement process with another company that faces the issues described in this report; OR
 - it will start a time-bound collective engagement process targeting multiple relevant companies; OR

- it will start a time-bound engagement process with a relevant government agency; OR
- it will exclude a company involved in violating relevant biodiversity principles; OR
- it will increase its monitoring, screening or verification efforts on biodiversity and provides details on the tools it will use for this.
- In case of a commitment to nature-positive investment, the insurer confirms that it will allocate a quantified amount- for example, a green bond, a transition bond (a financial instrument intended to fund projects with climate or environmental added value) or an impact investment fund for:
 - Investments that contribute to an ambitious, time-bound shift from monoculture plantations to a transition in the food system via for example polyculture farming; OR
 - Investments that restore and protect ecosystems that are in poor condition; OR
 - Investments that contribute to an ambitious, time-bound shift from animal protein to plant and alternative proteins to decrease animal protein consumption.

Box on scoring criteria and limitations of the study

In this case study, we focussed on a small selection of companies. This in order to keep the workload low for the insurers, as well as for the Fair Insurance Guide.

The downside of analysing a sample is that the scores represent only an indication of the full integration of biodiversity issues in the entire investment universe of an insurer. In theory, low-scoring insurers could have engagement programs with cocoa, corn or salmon companies in other biodiversity risk sectors outside of our company selection. At the same time, high-scoring insurers could in theory have limited engagement programs that accidentally cover the selected companies.

Disclaimer

Not all coalition members of the Eerlijke Verzekeringswijzer work on all themes and/or sectors on which the research of the Eerlijke Verzekeringswijzer focuses. Reports on specific themes therefore do not necessarily reflect the opinion of all coalition members of the Eerlijke Verzekeringswijzer.





Results research

Biodiversity is increasingly becoming a hot topic in the financial sector. But while it entered the mainstream investment agenda only in the past two years, the topic did not come out of the blue. Well-informed investors have already worked on the topic for years. This study shows that detailed investment policies with concrete requirements for investees are a necessary condition for successful screening and engagement trajectories. Not surprisingly, the insurers with high scores for the regular Fair Insurance Guide policy assessments also score very well in this research. The results of our research show that the financial institutions that have started integrating biodiversity in their investment processes years ago, are better aware of the risks and mitigate these energetically through screening, engagement, voting and exclusion. What is more, they also seize the opportunity to search for nature-positive investments. This is urgently needed, as we need to transform the cocoa, corn and salmon value chains into sectors where biodiversity can flourish.

Investments

As of November 2021, the nine insurance groups invested a total of **USD 3.5 billion** in 12 of the 15 selected companies.

Table 4 Overview bond and shareholdings per company

Company	Sum of per Investor Value (in mln US\$)
Nestlé	1.490
Walmart	735
Archer Daniels Midland	388
Tyson Foods	382
Mondelēz	364
Hershey	108
Mowi	14
MHP (Myronivsky Hliboproduct)	13
Lindt & Spruengli	7
Meiji Holdings	7
Lerøy Seafood Group	7
Grieg Seafood	3
Total	3.519

No investments in Long Ping High-Tech, Multiexport and Aqua Chile were identified.

In Table 5 you can find the bond and shareholdings per sector per insurance group. The group with the highest investment is on top of the table. Note to reader: these are only the investments in the selected companies. These are not the total investments of an insurance group in the cocoa, corn, salmon or retail sector.

Table 5 Overview bond and shareholdings per insurance group

Insurance group	Company	Investor Value (in mln US\$)	Sector	Sum of Per Investor Value (in mln US\$) ⁱ	
Allianz	Hershey	28	Cocoa	875	
	Meiji	1	Cocoa		
	Mondelez	233	Cocoa		
	Nestle	613	Cocoa		
	ADM	MHP	186	Corn	486
		Tyson Foods	3	Corn	
		Walmart	297	Corn	
	Walmart	388	Retailer	388	
Grieg Seafood	1	Salmon	16		
Lerøy Seafood	7	Salmon			
Mowi	8	Salmon			
Allianz Total				1.764	
Aegon	Hershey	36	Cocoa	176	
	Lindt&Spruengli	1	Cocoa		
	Meiji	1	Cocoa		
	Mondelez	35	Cocoa		
	Nestle	103	Cocoa		
	ADM	MHP	135	Corn	192
		Tyson Foods	9	Corn	
		Walmart	48	Corn	
Walmart	278	Retailer	278		
Grieg Seafood	2	Salmon	4		
Mowi	1	Salmon			
Aegon Total				649	
NN Group	Nestle	400	Cocoa	509	
	Hershey	30	Cocoa		
	Lindt&Spruengli	2	Cocoa		
	Meiji	4	Cocoa		
	Mondelez	73	Cocoa		
	ADM	Tyson Foods	48	Corn	56
		Walmart	7	Corn	
	Walmart	42	Retailer	42	
Mowi	1	Salmon	1		
NN Group Total				608	
Athora	Nestle	230	Cocoa	243	
	Lindt&Spruengli	2	Cocoa		
	Meiji	2	Cocoa		
	Mondelez	9	Cocoa		
	ADM	16	Corn	16	
Mowi	3	Salmon	3		
Athora Total				262	
ASR	Nestle	98	Cocoa	108	
	Hershey	2	Cocoa		
	Lindt&Spruengli	2	Cocoa		
	Mondelez	6	Cocoa		
	ADM	3	Corn	5	
Tyson Foods	2	Corn			

ⁱ Due to rounding, some totals may not correspond with the sum of the separate figures.

Insurance group	Company	Investor Value (in mln US\$)	Sector	Sum of Per Investor Value (in mln US\$) ⁱ
	Mowi	1	Salmon	1
ASR Total				115
Achmea	Nestle	2	Cocoa	17
	Hershey	10	Cocoa	
	Mondelez	6	Cocoa	
	Tyson Foods	20	Corn	20
	Walmart	24	Retailer	24
Achmea Total				61
VGZ	Hershey	3	Cocoa	38
	Mondelez	1	Cocoa	
	Nestle	37	Cocoa	
	Tyson	7	Corn	7
	Walmart	4	Retailer	4
VGZ Total				48
Menzis	Hershey	1	Cocoa	7
	Mondelez	1	Cocoa	
	Nestle	5	Cocoa	
	ADM	1	Corn	1
Menzis Total				8
CZ Groep	Lindt&Spruengli	1	Cocoa	4
	Nestle	3		
	Mowi	1	Salmon	1
CZ Groep Total				4
Total all insurance groups				
			Cocoa	1.977
			Corn	783
			Retailer	735
			Salmon	24
			Total	3.519

Scores & Clarification role different insurers

In this section, the scores for the policy assessment, investment questionnaire, nature-positive investments and additional commitments are presented.

In this section, we also give an update on the participation and other specifics regarding the nine insurance groups that have been assessed: Achmea, Aegon, Allianz, ASR, Athora Netherlands (previously known as Vivat), NN Group, CZ, Menzis and VGZ.

Allianz and Aegon did not participate actively in the study. As such, they received no points for the questionnaire on screening, engagement, voting and exclusion, as well as the nature-positive investments section. However, their responsible investment policies are published online and these documents are used for the policy assessment. As this research shows, Allianz and Aegon have the highest investments in the selected companies. Both insurers have received independent third-party recognition from institutions, such as MSCI, Moody's, Sustainalytics, Dow Jones Sustainability Index, and CDP. However, these ESG wide initiatives look at the topic of biodiversity alongside other issues, and do not give attention to the topic of monocultures in specific supply chains.

At the same time, the three health insurance groups (CZ, Menzis, VGZ) with limited investments in the selected companies fully cooperated with this study. This is laudable and shows the willingness of these groups to increase biodiversity integration in their investment practices. CZ, Menzis and VGZ were first assessed in the Fair Insurance Guide in 2018. These groups have no internal asset manager: they outsource the implementation of their responsible investment policies largely to external asset managers. The Fair Insurance Guide makes no distinction in its assessment whether an internal or external asset manager implements the policies on behalf of the insurance group. The responsibility remains for the policy development and implementation remains at the insurance group. With the help of an external asset manager, a detailed policy can be developed.

In the first quarter of 2022, after the research period of this study ended, VGZ has published new responsible investment policies. As a result, these documents could not be assessed in this study.

The policy scores are presented in Table 6.

Table 6 Policy assessment scores

	Achmea	Aegon	Allianz	Athora	ASR	CZ	Menzis	NN Group	VGZ
Investment principle	7,4	1	2,8	9,5	8,7	2,1	1	4,2	1
Total policy score	7,4	1	2,8	9,5	8,7	2,1	1	4,2	1
Companies contribute to an ambitious, time-bound shift from monoculture plantations to a transformation in the food system, for example via polyculture farming	0	0	0	1	0	0	0	0	0
Companies actively invest in restoration of vulnerable biodiversity	0	0	0	1	1	0	0	0	0
Companies prevent negative impacts on High Conservation Value (HCV) areas within their business operations and the areas they manage	1	0	0,75	1	1	0	0	1	0
Companies prevent negative impacts on protected areas that fall under the categories I-IV of the International Union for Conservation of Nature (IUCN) within their business operations and the areas they manage	1	0	0,75	1	1	0	0	1	0
Companies prevent negative impacts on protected areas that fall under the categories V-VI of the International Union for Conservation of Nature (IUCN) within their business operations and the areas they manage	0	0	0,75	0	1	0	0	0	0
Companies prevent negative impacts on UNESCO World Heritage sites within their business operations and the areas they manage	1	0	0,75	1	1	0	0	1	0
Companies prevent negative impacts on protected areas that fall under the Ramsar Convention on Wetlands within their business operations and the areas they manage	1	0	0,75	1	1	0	0	1	0
Companies prevent negative impacts for the species populations that are on the IUCN Red List of Threatened Species	1	0	0,75	1	1	0	0	0	0
Companies prevent the introduction of invasive alien species in ecosystems	1	0	0	1	1	0	0	0	0
Companies minimize use of water	1	0	0	1	1	0	0	1	0
Companies conduct water scarcity impact assessments in water scarce regions	1	0	0	1	1	1	0	1	0

	Achmea	Aegon	Allianz	Athora	ASR	CZ	Menzis	NN Group	VGZ
Investment principle	7,4	1	2,8	9,5	8,7	2,1	1	4,2	1
Companies have comprehensive mitigation measures in place to address community and ecosystem water requirements in areas where environmental impact assessments identify that significant impacts to water resources are likely	1	0	0	1	0,5	1	0	0	0
Companies prevent water pollution	1	0	0	1	1	0	0	1	0
Companies make an environmental impact assessment of the total consequences of a large scale project on biodiversity, at least according to GRI 304: Biodiversity 2016 or other relevant standards	1	0	0	1	1	0	0	0	0
Conversion of peatland and high-carbon stocks for agricultural development is unacceptable	1	0	0	1	1	0	0	0	0
Companies contribute to an ambitious, time-bound shift from animal protein to plant and alternative proteins in order to decrease animal protein consumption	0	0	0	1	0	0	0	0	0
Companies minimize use of pesticides	1	0	0,75	1	1	0	0	0	0
Companies integrate criteria on nature into their procurement and operational policies	1	0	0	1	1	1	0	1	0
Companies include clauses on the compliance with criteria on nature in their contracts with subcontractors and suppliers	0	0	0	1	1	1	0	0	0

The scores for the screening, engagement, voting and exclusion are presented in Table 7.

Table 7 Screening, engagement, voting, exclusion scores

	Achmea	Aegon	Allianz	Athora	ASR	CZ	Menzis	NN Group	VGZ
Total score	7,8	0	0	7,4	8,4	5,6	2	6,2	0
Indicators on screening (20% of total investment score)	8,3	0	0	6,7	8,3	5	8,3	8,3	0
Indicators on engagement (40% of total investment score), following the SMMARTT methodology	6,9	0	0	7,8	7,8	6,4	0,8	3,9	0
Indicators on voting (20% of total investment score)	6,7	0	0	6,7	10	0	0	10	0
Indicators on exclusion (20% of total investment score)	10	0	0	8,3	8,3	10	0	5	0

All insurance groups were asked to provide evidence for the positive impact on biodiversity and the absence of severe negative impacts of investments in any of the three sectors: cocoa, maize, salmon aquaculture. As described in the methodology the bar for awarding points is high. The Fair Insurance Guide expects a nature-positive investment to follow the principles described in the IPBES Global Assessment report:

1. “global dietary patterns need to converge around diets based more on plants, owing to the disproportionate impact of animal farming on biodiversity, land use and the environment.
2. more land needs to be protected and set aside for nature. (..)

3. we need to farm in a more nature-friendly, biodiversity-supporting way, limiting the use of inputs and replacing monoculture with polyculture farming practices.”

Many investees have developed projects and activities that contribute to this change, while they continue to operate in business-as-usual mode with the majority of their activities. Investment in a company that is not fully committed to a time-bound switch to a biodiversity-friendly way of farming, is not eligible for a score. In some cases, these companies even cause severe negative impacts on biodiversity.

Of course, it is commendable if investors choose to invest in best-in-class companies. However, as the case studies that are included in the following chapter of this report show: unfortunately being best in the ESG class of major agricultural companies does not automatically mean that the company is nature-positive. The Fair Insurance Guide-bar for nature-positive and absence of severe negative impact is higher than the bar usually set by ESG providers.

Furthermore, we looked for cases where the insurance group actively chose to invest in a company. The amount of the investment was not relevant, as long as the investor actively and deliberately selected the investment for its nature-positive impact. The scores for the nature-positive investments are presented in Table 8. The cases that are awarded points are described in Chapter 3.

Table 8 Nature-positive investments scores

	Achmea	Aegon	Allianz	Athora	ASR	CZ	Menzis	NN Group	VGZ
Nature-positive investments scores	5	0	0	2,5	10	0	0	2,5	0

The bonus scores for the commitments are presented in Table 9.

Table 9 Bonus points for new commitments

Insurance group	Bonus point for commitment	Content of commitment
Achmea	1	Achmea will join FAIRR’s (Farm Animal Investment Risk and Return) collective engagement initiative “Managing Biodiversity & Climate Risks in Aquafeed”.
Aegon	0	No commitment.
Allianz	0	No commitment.
ASR	1	ASR will start a time-bound engagement process with another company that faces the issues described in this report.
Athora Netherlands	1	In 2022, the biodiversity and no-deforestation policies will be further detailed and strengthened. The next phase of Athora’s no-deforestation engagement will include more companies. Together with ACTIAM, Athora is working on extending the scope of one of the credit portfolios such that it specifically invests in restoration and ecosystem protection.
CZ	1	CZ will start a time-bound engagement on biodiversity with the government of the Netherlands.

Insurance group	Bonus point for commitment	Content of commitment
Menzis	1	Menzis will update its biodiversity investment policy. Menzis will increase its monitoring, screening or verification efforts on biodiversity and provides details on the tools it will use for this.
NN Group	1	NN Group will include one or more extra assessment elements in its next policy update.
VGZ	1	VGZ appointed Actiam as its ESG fiduciary partner. It will start using Actiam's biodiversity screening methodology and develop a biodiversity policy.

Overview scores

In Table 10, the overview of the scores is presented. The three highest-scoring groups are ASR, Achmea and Athora Netherlands. These insurance groups lead the way in nature-friendly investment practices. NN Group and CZ make up the middle group, with Aegon, Allianz, Menzis and VGZ lagging. Please note that both Aegon and Allianz did not actively participate in this research. Almost all groups have committed to improving their biodiversity investment practices.

Table 10 Overview scores

Insurance group	Total score	Policy (20%)	Investments (60%)	Nature-positive investments (20%)	Bonus point for commitment
Achmea	8	7,4	7,8	5	1
Aegon	1	1	0	0	0
Allianz	1	2,8	0	0	0
ASR	10	8,7	8,4	10	1
Athora Netherlands	8	9,5	7,4	2,5	1
CZ	5	2,1	5,6	0	1
Menzis	2	1	2	0	1
NN Group	6	4,2	6,2	2,5	1
VGZ	2	1	0	0	1





Profiles and assessments

This chapter presents the results of this research per insurance company. For each insurance company, an overview is provided that includes a company profile, an overview of the financial relationships with the selected companies and the scores it has received, including justifications. The scores reflect the approach of each insurance company to the given sectors.

Achmea

Achmea B.V. (Achmea) is a leading private insurance company based in the Netherlands. Achmea provides primarily insurance services, including health, life and non-life, as well as pension and asset management services. In addition, its subsidiary Achmea Bank offers retail banking services including mortgages, to private customers in the Netherlands. Internationally the insurance company is active in Turkey, Greece, Slovakia, Canada and Australia. As of December 31st 2021, Achmea Investment Management had assets with a total value of € 203 billion under management.

Financial relationships with selected companies

As of November 2021, Achmea invested USD 61 million in 5 of the selected companies:

Table 11 Investments by Achmea in the selected companies (Nov. 2021)

Insurance group	Company	Investor Value (in mln US\$)	Sector	Sum of Per Investor Value (in mln US\$) ⁱⁱ
Achmea	Nestle	2	Cocoa	17
	Hershey	10	Cocoa	
	Mondelez	6	Cocoa	
	Tyson Foods	20	Corn	20
	Walmart	24	Retailer	24
Achmea Total				61

Assessment and score overview

Achmea scores a **7.4** for the policy assessment. This table shows how Achmea scores on screening, engagement, voting and exclusion.

Table 12 Achmea's responsible investment practices

Aspect of responsible investment	Score
Screening (20% of total investment score)	8,3
Engagement (40% of total investment score)	6,9
Voting (20% of total investment score)	6,7
Exclusion (20% of total investment score)	10
Total investment score	7,8

Nature-positive investments

Achmea scores a **5** for nature-positive investments.

The following cases are considered as nature-positive investments:

ⁱⁱ Due to rounding, some totals may not correspond with the sum of the separate figures.

- Achmea invests in the Triodos Food Transition Europe Fund. This fund provides long term, mission-aligned private equity and venture capital to leading European companies in the transition towards sustainable food and agricultural systems. Achmea has an important share in the fund.
- Achmea has taken a significant equity share in Land Life Company and as a result, is the largest external investor in this reforestation company. In this way, Achmea will be supporting Land Life Company’s mission to help restore two billion hectares of degraded land around the world.

Bonus Point

Achmea receives **1** bonus point for the commitment to join FAIRR’s collective engagement initiative “Managing Biodiversity & Climate Risks in Aquafeed”.

Conclusions

Achmea’s total score for this case study is an 8.

Table 13 Total score Achmea

Section	Score	Weighted score
Policy assessment	7	1,5
Investments	8	4,7
Nature-positive cases	5	1
Bonus point commitment	1	1
Total score case study biodiversity		8

Achmea has a good responsible investment policy, covering the majority of the assessed investment principles on biodiversity. This is reflected in the screening overview, which covers the most relevant biodiversity issues for the selected investees. In its engagement program, Achmea targets 5 out of 5 of its investees selected for this study. In these engagement trajectories, the SMMARTT methodology can be identified: the engagement is Specific, Measurable, Multistakeholder, Achievable, Realistic, Timebound and Transparent. However, documentation on the engagement indicators is not structurally provided for all 5 cases. This lowers the score.

Achmea occasionally votes on shareholders' meetings to address the biodiversity impact of a company. Achmea’s exclusion approach contains an escalation strategy that shows the investor is willing to stop investing if engagements have failed.

Outside the scope of this study, Achmea notes that it is involved in 3 engagement processes to promote responsible agricultural practices: “

- Achmea IM works with group of US investors on reduce of pesticide use (Lead investor Mercy Investment Services)
- Achmea contributes tot the collective engagement project of the ICSR covenant insurance sector regarding Biodiversity in the Soy sector;
- Achmea and Achmea IM are signatories of the Finance For Biodiversity Pledge (FFBP). Achmea IM is co-chair of engagement working group of the FFBP. The FFBP also works on political advocacy (govt. engagement)”.

Aegon

Aegon N.V. (Aegon) is a publicly-listed leading insurance and banking group based in the Netherlands. Aegon has life insurance and pensions operations in the Americas, Europe and Asia and is also active in savings and asset management operations, accident and health insurance, general insurance and banking operations. The group serves customers in Europe, Asia and the Americas, including the Netherlands, United Kingdom, Singapore, Hong Kong, and the United States. Aegon Asset Management had € 388 billion assets under management as of 31 December 2020.

Please note that Aegon did not actively participate in this research which may have impacted their overall score.

Financial relationships with selected companies

As of November 2021, Aegon invested USD 649 million in 11 of the selected companies.

Table 14 Investments by Aegon in the selected companies (Nov. 2021)

Insurance group	Company	Investor Value (in mln US\$)	Sector	Sum of Per Investor Value (in mln US\$) ⁱⁱⁱ
Aegon	Hershey	36	Cocoa	176
	Lindt&Spruengli	1	Cocoa	
	Meiji	1	Cocoa	
	Mondelez	35	Cocoa	
	Nestle	103	Cocoa	
	ADM	135	Corn	192
	MHP	9	Corn	
	Tyson Foods	48	Corn	
	Walmart	278	Retailer	278
	Grieg Seafood	2	Salmon	4
	Mowi	1	Salmon	
Aegon Total				649

Assessment and score overview

Aegon scores a **1** for the policy assessment.

This table shows how Aegon scores on screening, engagement, voting and exclusion.

Table 15 Aegon's responsible investment practices

Aspect of responsible investment	Score
Screening (20% of total investment score)	0
Engagement (40% of total investment score)	0
Voting (20% of total investment score)	0

ⁱⁱⁱ Due to rounding, some totals may not correspond with the sum of the separate figures.

Exclusion (20% of total investment score)	0
Total investment score	0

Nature-positive investments

Aegon scores a 0 for nature-positive investments.

Bonus Point

Aegon does not receive a bonus point, because no new commitments were made.

Conclusions

Aegon's total score for this case study is **1**. Aegon did not want to participate in the study. As such, Aegon received no points for the questionnaire on screening, engagement, voting and exclusion, as well as the nature-positive investments section. However, its responsible investment policies are published online and these documents are used for the policy assessment.

Aegon may be somehow involved in responsible investment practices on biodiversity, but due to the lack of cooperation, this is not assessed.

Table 16 Total score Aegon

Section	Score	Weighted score
Policy assessment	1	0,2
Investments	0	0
Nature-positive cases	0	0
Bonus point commitment	0	0
Total score case study biodiversity		1

Allianz

Allianz SE (Allianz) is a global insurance and asset management group with headquarters in Germany that serves customers in Europe, Asia, the Americas and Australia. It provides a wide range of life and non-life insurance and asset management services to its retail and corporate clients. The group's core markets are Germany, France, Italy and the United States. In addition, the United Kingdom and the Asia-Pacific region are crucial markets for the group's asset management services. As of 31 December 2020, Allianz had a total value of € 2,389 billion in assets under management.

Please note that Allianz did not actively participate in this research which may have impacted their overall score.

Financial relationships with selected companies

As of November 2021, Allianz invested USD 1.764 million in 11 of the selected companies:

Table 17 Investments by Achmea in the selected companies (Nov. 2021)

Insurance group	Company	Investor Value (in mln US\$)	Sector	Sum of Per Investor Value (in mln US\$) ^{iv}
Allianz	Hershey	28	Cocoa	875
	Meiji	1	Cocoa	
	Mondelez	233	Cocoa	
	Nestle	613	Cocoa	
	ADM	186	Corn	486
	MHP	3	Corn	
	Tyson Foods	297	Corn	
	Walmart	388	Retailer	388
	Grieg Seafood	1	Salmon	16
	Lerøy Seafood	7	Salmon	
	Mowi	8	Salmon ^v	
Allianz Total				1.764

Assessment and score overview

Allianz scores a **2,8** for the policy assessment.

This table shows how Allianz scores on screening, engagement, voting and exclusion.

Table 18 Allianz's responsible investment practices

Aspect of responsible investment	Score
Screening (20% of total investment score)	0
Engagement (40% of total investment score)	0
Voting (20% of total investment score)	0
Exclusion (20% of total investment score)	0

^{iv} Due to rounding, some totals may not correspond with the sum of the separate figures.

Total investment score	0
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Nature-positive investments

Allianz scores a **0** for nature-positive investments.

Bonus Point

Allianz does not receive a bonus point, because no new commitments were made.

Conclusions

Allianz's total score for this case study is **1**. Allianz did not want to participate in the study. As such, Allianz received no points for the questionnaire on screening, engagement, voting and exclusion, as well as the nature-positive investments section. However, its responsible investment policies are published online and these documents are used for the policy assessment.

Allianz may be somehow involved in responsible investment practices on biodiversity, but due to the lack of cooperation, this is not assessed.

Table 19 Total score Allianz

Section	Score	Weighted score
Policy assessment	2,8	0,6
Investments	0	0
Nature-positive cases	0	0
Bonus point commitment	0	0
Total score case study biodiversity		1

ASR

ASR Nederland N.V. (ASR) is a Dutch insurance group with operations exclusively in the Netherlands. ASR offers a wide range of financial products, including property & casualty insurance, occupational disability and health insurance, group and individual pensions, individual life insurance and asset management services for insurance entities and institutional clients. As of 31 December 2020, ASR had investments for its own account of € 37 billion and managed € 25 billion assets on behalf of clients.

Financial relationships with selected companies

As of November 2021, ASR invested USD 115 million in 7 of the selected companies:

Table 20 Investments by ASR in the selected companies (Nov. 2021)

Insurance group	Company	Investor Value (in mln US\$)	Sector	Sum of Per Investor Value (in mln US\$) ^v
ASR	Nestle	98	Cocoa	108
	Hershey	2	Cocoa	
	Lindt&Spruengli	2	Cocoa	
	Mondelez	6	Cocoa	
	ADM	3	Corn	5
	Tyson Foods	2	Corn	
	Mowi	1	Salmon	1
ASR Total				115

Assessment and score overview

ASR scores an **8,7** for the policy assessment.

This table shows how ASR scores on screening, engagement, voting and exclusion.

Table 21 ASR's responsible investment practices

Aspect of responsible investment	Score
Screening (20% of total investment score)	8,3
Engagement (40% of total investment score)	7,8
Voting (20% of total investment score)	10
Exclusion (20% of total investment score)	8,3
Total investment score	8,4

Nature-positive investments

ASR scores a **10** for nature-positive investments. The following cases are considered as nature-positive investments:

^v Due to rounding, some totals may not correspond with the sum of the separate figures.

- Via Rubio Impact Ventures ASR is an important investor in Mosa Meat. Mosa Meat develops cultivated meat from animal cells without the need to slaughter animals and with a dramatically reduced environmental impact. In a new paper published in the journal Nature Food, leading cultivated meat brand Mosa Meat reveals how they managed to replace Fetal Bovine Serum (which is very harmful to animal welfare) and achieve muscle differentiation without genetically modifying the cells in any way.
- ASR is an important investor in the PYMWYMIC Healthy Ecosystems Fund. Via this fund, it invests in Rootwave. Rootwave aims to reduce the use of chemicals and is a pioneer in developing and marketing electrical weed control solutions that offer a scalable and sustainable alternative to chemical herbicides. Rootwave technology uses electricity to boil weeds inside out from the root upwards and the portfolio company is contributing to more sustainable agriculture, including the corn sector.
- ASR recently invested in Novameat via Rubio Impact Ventures. Novameat has developed a patented technology platform to texturize plant-based proteins into 'whole cut' products, such as steak, pork chops or chicken breast. Current plant-based meat alternatives are based on extrusion technologies and can mimic ground products and small fibrous products but are unable to offer the texture, mouthfeel and size that is associated with roughly half of worldwide animal meat consumption: whole cuts of animal muscle.
- ASR is one of the largest owners of land in the Netherlands, both agricultural land and nature estates. ASR is investing in the climate resilience and biodiversity restoration of its nature estates. There is a clear fund-wide pathway for a sustainable transition. This includes land where corn is grown. Also, farmers receive a discount on their lease if they comply with ASR's sustainability demands for soil and biodiversity.

Bonus Point

ASR receives 1 bonus point because it will start a time-bound engagement process with another company that faces the issues described in this report.

Conclusions

ASR's total score for this case study is 10.

Table 22 Total score ASR

Section	Score	Weighted score
Policy assessment	8,7	1,7
Investments	8,4	5,1
Nature-positive cases	10	2
Bonus point commitment	1	1
Total score case study biodiversity		10

ASR has a robust responsible investment policy, covering all but two of the assessed investment principles on biodiversity. This is reflected in the screening overview, which covers the most relevant biodiversity issues. In its engagement program, ASR targets 7 out of 7 of its investees selected for this study. In these engagement trajectories, the SMMARTT methodology can be identified. ASR has more than once voted on shareholders' meetings to address the biodiversity impact of a company. ASR has an escalation strategy that can lead to the exclusion of a company or government. Walmart is excluded from investment.

Outside the scope of this study, ASR notes that it is involved in *“many engagement trajectories with different focus areas. As most investors, we try to approach these engagements in a systemic and holistic way: not always focused on only 1 commodity but on company-wide policies to prevent biodiversity loss, deforestation and other negative impacts.”*

Athora Netherlands

Vivat N.V has been renamed Athora Netherlands N.V. in December 2020, following the acquisition of the organisation by Athora Holding Ltd., a European-focused life insurance and reinsurance group, in April 2020. Vivat's non-life business was sold to NN Group in 2020.

Athora Netherlands is organised in three business lines: Pension Business, Life Service Business and Asset Management. Athora Netherlands NV is the holding company of two insurance companies with strong positions in the Dutch life insurance markets. Through its main brand Zwitserleven, Athora Netherlands provides pension and life insurance products. Under the brand Reaal, Athora Netherlands sells and provides services for life insurance products. Athora Netherlands also offers asset management services via its asset manager Actiam, which also manages its account investments. On 31 December 2020, Athora Netherlands had assets under administration with a value of € 66.0 billion.

Financial relationships with selected companies

As of November 2021, Athora Netherlands invested USD 262 million in 6 of the selected companies:

Table 23 Investments by Athora Netherlands in the selected companies (Nov. 2021)

Insurance group	Company	Investor Value (in mln US\$)	Sector	Sum of Per Investor Value (in mln US\$) ^{vi}
Athora	Nestle	230	Cocoa	243
	Lindt&Spruengli	2	Cocoa	
	Meiji	2	Cocoa	
	Mondelez	9	Cocoa	
	ADM	16	Corn	16
	Mowi	3	Salmon	3
Athora Total				262

Assessment and score overview

Athora Netherlands scores a **9,5** for the policy assessment.

This table shows how Athora Netherlands scores on screening, engagement, voting and exclusion.

Table 24 Athora Netherlands's responsible investment practices

Aspect of responsible investment	Score
Screening (20% of total investment score)	6,7
Engagement (40% of total investment score)	7,8
Voting (20% of total investment score)	6,7
Exclusion (20% of total investment score)	8,3
Total investment score	7,4

^{vi} Due to rounding, some totals may not correspond with the sum of the separate figures.

Nature-positive investments

Athora Netherlands scores a **2,5** for nature-positive investments.

The following case is considered a nature-positive investment:

In 2021, on behalf of Athora Netherlands, ACTIAM has invested in the IBRD Sustainable Development Bond. The proceeds of this bond are a.o. used for advancing climate-smart agriculture, managing water for sustained water resource utilization, addressing biodiversity conservation and preparing national plans and legislation to protect the environment.

Bonus Point

Athora Netherlands receives 1 bonus point for the following commitments:

- In 2022, the biodiversity and no-deforestation policies will be further detailed and strengthened.
- The next phase of Athora's no-deforestation engagement will include more companies.
- Together with ACTIAM, Athora is working on extending the scope of one of the credit portfolios such that it specifically invests in restoration and ecosystem protection.

Conclusions

Athora Netherlands's total score for this case study is an **8**.

Table 25 Total score Athora Netherlands

Section	Score	Weighted score
Policy assessment	9,5	1,9
Investments	7,4	4,5
Nature-positive cases	2,5	0,5
Bonus point commitment	1	1
Total score case study biodiversity		8

Athora NL has a very good responsible investment policy, covering all but one of the assessed investment principles on biodiversity. This is reflected in the screening overview, which covers the most relevant biodiversity issues. In its engagement program, Athora Netherlands targets 5 out of 6 of its investees selected for this study. In these engagement trajectories, the SMMARTT methodology can be identified: the engagement is Specific, Measurable, Multistakeholder, Achievable, Realistic, Timebound and Transparent.

Athora Netherlands occasionally votes on shareholders' meetings to address the biodiversity impact of a company. ACTIAM has formally excluded Long Ping High-Tech and Walmart for all funds and has excluded Tyson Foods and Hershey for the sustainable funds.

Outside the scope of this study, Athora Netherlands notes that: *"The scope of ACTIAM's zero-deforestation engagement program includes a larger set of companies than those noted within the scope of this study. The companies targeted all have soft commodities within their value chain, ranging from traders and producers to consumer goods and retail companies to help promote an industry wide effort to reaching zero deforestation."*

CZ

OWM CZ Groep U.A. (CZ) is a health insurance group based in the Netherlands. CZ provides health insurance through the labels CZ, Nationale-Nederlanden and OHRA to clients in the Netherlands. The insurance company holds a 22% share in the Dutch health insurance market. Insurance premiums and contributions amounted to € 11,068 million in 2020. Assets are not internally managed, asset management is outsourced.

Financial relationships with selected companies

As of November 2021, CZ invested USD 4 million in 3 of the selected companies:

Table 26 Investments by CZ in the selected companies (Nov. 2021)

Insurance group	Company	Investor Value (in mln US\$)	Sector	Sum of Per Investor Value (in mln US\$) ^{vii}
CZ Groep	Lindt&Spruengli	1	Cocoa	4
	Nestle	3		
	Mowi	1	Salmon	1
CZ Groep Total				4

Assessment and score overview

CZ scores a **2** for the policy assessment.

This table shows how CZ scores on screening, engagement, voting and exclusion.

Table 27 CZ's responsible investment practices

Aspect of responsible investment	Score
Screening (20% of total investment score)	5
Engagement (40% of total investment score)	6,4
Voting (20% of total investment score)	0
Exclusion (20% of total investment score)	10
Total investment score	5,6

Nature-positive investments

CZ scores a **0** for nature-positive investments.

Bonus Point

CZ receives **1** bonus point because it will start a time-bound engagement on biodiversity with the government of The Netherlands.

Conclusions

CZ's total score for this case study is a **5**.

^{vii} Due to rounding, some totals may not correspond with the sum of the separate figures.

Table 28 Total score CZ

Section	Score	Weighted score
Policy assessment	2,1	0,4
Investments	5,6	3,3
Nature-positive cases	0	0
Bonus point commitment	1	1
Total score case study biodiversity		5

CZ's responsible investment policy lacks details on the biodiversity requirements of investees. We would like to note that CZ disagrees with the Fair Insurance Guide on the implementation of the Fair Finance Guide Methodology for policy assessments.

The FFGI expects investors to translate general policy targets into investment principles that include (a) expectations towards investees, (b) include concrete criteria and definitions and (c) are based on international standards. CZ considers the UN Sustainable Development Goals and UN Global Compact to cover this. However, the Sustainable Development Goals do not include expectations towards investees nor concrete criteria and definitions on biodiversity, while the also generic criteria from the UN Global Compact do not cover all relevant biodiversity principles.

CZ applies biodiversity screening to all its investments, but it is unknown if the risks identified in this study are identified in the 3 companies CZ invests in.

CZ outsources its engagement. It targets 2 out of the 3 investees selected for this case study. The engagement includes Specific, Measurable, Achievable, Realistic and Time-bound targets. It is unknown if the engagement follows a multistakeholder approach. CZ publicly reports on some of its engagement activities. CZ uses additional forms of leverage to mitigate biodiversity risks and excludes the company in case of an unsuccessful engagement. It has excluded Walmart.

Menzis

Menzis is a health insurance group with a cooperative structure based in the Netherlands. Menzis provides health insurance through the labels Menzis and Anderzorg to clients in the Netherlands. The insurance company had 2.1 million clients, and insurance premiums and contributions amounted to € 6.630 million in 2020. Assets are externally managed.

Financial relationships with selected companies

As of November 2021, Menzis invested USD 8 million in 4 of the selected companies:

Table 29 Investments by Menzis in the selected companies (Nov. 2021)

Insurance group	Company	Investor Value (in mln US\$)	Sector	Sum of Per Investor Value (in mln US\$) ^{viii}
Menzis	Hershey	1	Cocoa	7
	Mondelez	1	Cocoa	
	Nestle	5	Cocoa	
	ADM	1	Corn	1
Menzis Total				8

Assessment and score overview

Menzis scores a **1** for the policy assessment.

This table shows how Menzis scores on screening, engagement, voting and exclusion.

Table 30 Menzis' responsible investment practices

Aspect of responsible investment	Score
Screening (20% of total investment score)	8,3
Engagement (40% of total investment score)	0,8
Voting (20% of total investment score)	0
Exclusion (20% of total investment score)	0
Total investment score	2

Nature-positive investments

Menzis scores a **0** for nature-positive investments.

Bonus Point

Menzis receives **1** bonus point for the following commitments:

- Menzis will update its biodiversity investment policy.
- Menzis will increase its monitoring, screening or verification efforts on biodiversity and provides details on the tools it will use for this.

^{viii} Due to rounding, some totals may not correspond with the sum of the separate figures.

Conclusions

Menzis's total score for this case study is an **2**.

Table 31 Total score Menzis

Section	Score	Weighted score
Policy assessment	1	0,2
Investments	2	1,2
Nature-positive cases	0	0
Bonus point commitment	1	1
Total score case study biodiversity		2

Menzis is developing a new responsible investment policy, but this policy was not published during the research phase of this case study (fourth quarter of 2021). Menzis' new engagement strategy will include a voting policy and escalation process that can lead to exclusion.

In its screening process, Menzis identified deforestation issues in 4 out of 4 of its investees selected for this case study.

Menzis currently participates in collective engagement efforts via its external service provider. This includes two biodiversity cases for the investees selected for this case study. However, the content, goals and intermediary results of the engagement are unclear, which leads to a lower score on this section.

NN Group

NN Group N.V. (NN Group) is a financial services company based in the Netherlands. NN Group is primarily active in Europe with additional activities in Japan. NN Group's services include group and individual life insurance, non-life insurances, and asset management services. In addition, the Group offers retail banking services in the Netherlands. NN Group's asset manager NN Investment Partners (NNIP) had a value of € 300 billion assets under management at year-end 2020 (of which € 102 billion third party asset management).

Financial relationships with selected companies

As of November 2021, NN Group invested USD 608 million in 9 of the selected companies:

Table 32 Investments by NN Group in the selected companies (Nov. 2021)

Insurance group	Company	Investor Value (in mln US\$)	Sector	Sum of Per Investor Value (in mln US\$) ^{ix}
NN Group	Nestle	400	Cocoa	509
	Hershey	30	Cocoa	
	Lindt&Spruengli	2	Cocoa	
	Meiji	4	Cocoa	
	Mondelez	73	Cocoa	
	ADM	48	Corn	56
	Tyson Foods	7	Corn	
	Walmart	42	Retailer	42
Mowi	1	Salmon	1	
NN Group Total				608

Assessment and score overview

NN Group scores a **4,2** for the policy assessment.

This table shows how NN Group scores on screening, engagement, voting and exclusion.

Table 33 NN Group's responsible investment practices

Aspect of responsible investment	Score
Screening (20% of total investment score)	8,3
Engagement (40% of total investment score)	3,9
Voting (20% of total investment score)	10
Exclusion (20% of total investment score)	5
Total investment score	6,2

Nature-positive investments

NN Group scores a **2,5** for nature-positive investments.

The following case is considered as nature-positive investments:

^{ix} Due to rounding, some totals may not correspond with the sum of the separate figures.

In the words of NN Group: *“Chr Hansen is in the NN Climate & Environment fund that aims to reduce stress on our global ecosystem. The fund invests in companies offering solutions with a positive environmental impact. The main purpose is to change consumption and production patterns to stay within planetary boundaries by investing in four goals: Water Management, Food Sufficiency, Energy Transition, and Circular Economy. The fund aims to generate a positive societal impact and an attractive financial return simultaneously. This is achieved by investing in companies that provide solutions for improving the global ecosystem and helping humankind stay within the planetary boundaries.”*

“Chr. Hansen develops and produces cultures, enzymes, probiotics and natural colours for foods, beverages, dietary supplements as well as animal feed and plant protection. Their solutions enable food manufacturers, such as those in the corn and salmon sector to produce more with less – while also reducing the use of chemicals and other synthetic additives.” “NN further engaged with Chr. Hansen on sustainability targets to enhance their reporting on KPIs and SDGs.”

Bonus Point

NN Group receives 1 bonus point because it will include one or more extra assessment elements in its next policy update.

Conclusions

NN Group’s total score for this case study is a 6.

Table 34 Total score NN Group

Section	Score	Weighted score
Policy assessment	4,2	0,8
Investments	6,2	3,7
Nature-positive cases	2,5	0,5
Bonus point commitment	1	1
Total score case study biodiversity		6

NN Group’s responsible investment policy that applies to all investments is lacking important principles on biodiversity. A few major indicators on the prevention of negative impacts on protected areas are covered by the policy. For example, NN Group expects companies to protect critical habitats such as IUCN protected areas I-IV and UNESCO World Heritage sites. NN Group maintains more detailed biodiversity requirements for a small range of its funds, but the Fair Insurance Guide is assessing group-wide investment policies.

This is reflected in the screening overview, which covers several relevant biodiversity issues. In its engagement program, NN Group targets 4 out of 9 of its investees selected for this study. In these engagement trajectories, the SMMARTT methodology cannot fully be identified: the engagement is Specific, Measurable, Multistakeholder, Achievable, Realistic and Timebound, but it is not transparent. Of the insurance groups in this study, NN Group is the most active in the engagement trajectories under the banner of the Farm Animal Investment Risk and Return (FAIRR).³⁴

NN Group has more than once voted on shareholders' meetings to address the biodiversity impact of a company, including for Mondelez to *Report on Deforestation in Cocoa Supply Chain* and for Tyson Foods to *Report on Deforestation Impacts*. NN Group maintains a clear strategy for escalation and eventually exclusion in case the initial engagement is not successful.

Outside the scope of this study, NN Group notes that: *“Within the International Responsible Business Conduct (IRBC) Agreement for the Insurance Sector we also engage with Danone en Unilever engagement on biodiversity.”*

Furthermore, *“NN IP is a member of the PRI working group on Sustainable Palm Oil. This group focuses on palm oil growers, traders and several regional banks. In 2019, we also became a member of the Roundtable on Sustainable Palm Oil (RSPO) to further strengthen our commitment to this sector. The RSPO is a multi-stakeholder forum that represents the entire supply chain. It has established a certification system for different stakeholders to ensure that palm oil is both sustainably produced and transparently traded. We lead the engagement with five growers and three regional banks.”*

VGZ

Coöperatie VGZ U.A. (VGZ) is a health insurance group based in the Netherlands. VGZ provides health insurance through different labels including VGZ, Bewuzt, United Consumers and Univé to clients in the Netherlands. The insurance company holds a 22% share in the health insurance market. Insurance premiums and contributions amounted to € 11.886 million in 2020. Assets are internally and externally managed.

Financial relationships with selected companies

As of November 2021, VGZ invested USD 48 million in 5 of the selected companies:

Table 35 Investments by VGZ in the selected companies (Nov. 2021)

Insurance group	Company	Investor Value (in mln US\$)	Sector	Sum of Per Investor Value (in mln US\$) ^x
VGZ	Hershey	3	Cocoa	38
	Mondelez	1	Cocoa	
	Nestle	37	Cocoa	
	Tyson	7	Corn	7
	Walmart	4	Retailer	4
VGZ Total				48

Assessment and score overview

VGZ scores a **1** for the policy assessment.

This table shows how VGZ scores on screening, engagement, voting and exclusion.

Table 36 VGZ's responsible investment practices

Aspect of responsible investment	Score
Screening (20% of total investment score)	0
Engagement (40% of total investment score)	0
Voting (20% of total investment score)	0
Exclusion (20% of total investment score)	0
Total investment score	0

Nature-positive investments

VGZ scores a **0** for nature-positive investments.

Bonus Point

VGZ receives **1** bonus point because it appointed Actiam as its ESG fiduciary partner. It will start using Actiam's biodiversity screening methodology and develop a biodiversity policy.

^x Due to rounding, some totals may not correspond with the sum of the separate figures.

Conclusions

VGZ's total score for this case study is an **2**, as the bonus point is added to the lowest possible total score of 1.

Table 37 **Total score VGZ**

Section	Score	Weighted score
Policy assessment	1	0,2
Investments	0	0
Nature-positive cases	0	0
Bonus point commitment	1	1
Total score case study biodiversity		2

Up until 2021, VGZ had no policy and engagement activities on biodiversity. However, in the first quarter of 2022, after the research period of this study ended, VGZ has published new responsible investment policies. These documents are not assessed in this study. VGZ indicates it starts working with external asset manager Actiam to implement screening procedures in 2022.





Case studies

Introduction

Currently, financial institutions and consumers have become increasingly aware of the negative impact of large-scale monoculture soy, beef and palm oil production on biodiversity. However, less attention is given to how we can improve current practices of food production, how to make sustainable improvements and how to create a systems change. Besides focusing on a few high-impact crops, attention should be given to how the current food system undermines biodiversity, small-scale food producers in the global South and creates a capital intensive industry, how our reliance on a few crops is a threat to global stability and how financial institutions like the global insurance industry should be made more aware about the material risk investing in mono-cropping is to their bottom-line.

This case study intends to widen and change the focus on biodiversity by focusing on our food system and the interrelated land/sea use change as a driver of biodiversity loss. It focusses in specific on:

- Other mono-cultures than soy/beef and palm oil. In previous reports, the Fair Insurance Guide has already focused on soy/beef and palm oil. The biodiversity risks of these sectors are more familiar for most investors and another study on this topic is not going to help investors make better investment decisions.
- The need for systems change in our food production.

This case study will therefore focus on actors in three sectors that have a great impact on the ecosystems where they operate: maize, salmon aquaculture and cacao. Producers, traders, food and feed manufacturers and retailers have a shared responsibility to protect the biodiversity in producer landscapes. This supply chain responsibility is defined by the OECD Guidelines for Multinational Enterprises.

The need for a holistic and integrated approach

Agricultural systems are essential for the food security and nutrition, and economic well-being of people around the globe. While many forms of agriculture support healthy people and a healthy planet, food systems globally are also a key contributor to environmental degradation. For example, chemical pesticides kill many non-target species and their run-off impacts the aquatic environment and repeated exposure can create resistance in target species.

At the same time chemical fertilizer can increase soil fertility, but can also cause water, soil and air pollution. Agriculture occupies about 37% of the world's total land area, and unsustainable agricultural expansion has resulted in significant loss of forests and biodiversity, land and soil degradation, and considerable greenhouse gas (GHG) emissions. Cropland for animal feed and pastures accounts for an estimated 3.43 billion hectares, which is a major contribution to current global land-use change. Furthermore, a rising global population and changes in consumption patterns towards higher protein diets will result in more carbon-intensive food production that will further strain global land-use systems.

The many drivers of agricultural land use reinforce the need for a holistic and integrated supply chain approach in transforming food systems. Agriculture accounts for 70% of global freshwater withdrawals and is responsible for up to 80% of global deforestation. Drivers linked to food production causes 70% of terrestrial and 50% of freshwater biodiversity loss. While agricultural landscapes can safeguard ecosystem services and biodiversity, the valuation of these services provided by the natural capital is generally not considered in land management decisions.

Monoculture

Monoculture is essentially the opposite of polyculture. The uniformity of monocultures and industrial-scale livestock rearing can leave these systems vulnerable to economic, climate-induced and natural disaster shocks that result in significant economic losses and large-scale suffering of rural communities. Maintaining a diverse variety of crop species and growing a varied range of crops can save the potential jeopardizing of the entire economy. An example of the devastation monoculture crop farming can cause is the maize blight of 1970 which ruined more than 15 per cent of maize crops in North America. This happened due to 70% of the crop being grown at the same high yield variety, making the maize more susceptible to pests and diseases.

Cocoa

The growing demand for cocoa beans and products worldwide has been met by expanding the area under cocoa production. Throughout the tropics, cocoa has increasingly been cultivated in full-sun monocultures to maximize short-term productivity and profitability, which has been associated with soil erosion and degradation, biodiversity loss, as well as increased susceptibility to climate change impacts and pests and diseases.

Salmon aquaculture

The consequences of unsustainable food production extend into aquatic systems. Fish provide 17% of animal protein consumed globally and an even higher percentage in some countries. The excessive use of chemical fertilizers and harmful pesticides in agriculture is a large source of water pollution, which then runs off into freshwater ecosystems and coastal areas. Salmon aquaculture, like other edible aquatic organisms including fish, shellfish and aquatic plants are situated within the food system and have negative externalities like any other major commodities, but are largely missing from key food policy dialogues. For example, SDG 2 (Zero Hunger) includes a focus on food production systems but targets do not mention fisheries.

Maize

Maize cultivation is one of humankind's earliest innovations. Maize has many varieties that yield numerous products, at the same time maize today makes up a large portion of all the genetically modified crops produced. Maize is used both for human consumption and animal feed, thereby linking the sector to animal husbandry. The main environmental impacts of the sector include water use, impact on soil quality via among others fertilizers use, GHG emissions and impact on biodiversity.



Cocoa

'Many cacao farmers have never tasted chocolate before. They do not know what one makes from cacao beans.' says Kwame Frimpong Sekyere, who

works as a researcher at Tropenbos Ghana with the farmers in the Ashanti area in Ghana.

Although cacao beans originate from Latin America, today cacao is grown in tropical areas worldwide. Ghana is the second-largest producer of cacao beans – after Ivory Coast - and cacao beans are the chief agricultural export commodity of the country. Cacao refers to the raw cacao bean, cocoa is a processed cacao bean. Cacao is produced as a cash crop in the country's forested area as cacao is a shade tree and beans grow best under the tree canopy.

Although most cacao production is carried out by smallholder farmers – with around 800,000 households across Ghana relying on cocoa for their livelihoods - a small number of large cacao producers dominate the industry. The cacao industry is regulated by the Cocoa Marketing Board (COCOBOD) and many international companies such as Nestlé, Barry Callebaut, Mondelez, Mars and others are active on the Ghanaian market.

Plagued by sustainability issues

The sector is plagued by sustainability issues. Such as on the social side with an estimated 2 million children involved in the industry in West Africa alone, and many smallholder farmers living in poverty. But also governance issues such as corruption and payment of false checks to farmers and environmental issues such as fertilizer and pesticide use, but most importantly its contribution to deforestation, are part of the problem.

According to the Ghana Forestry Commission, a Ghana government agency, almost 80% of Ghana's forest resources were lost to illegal logging operations between 1990 and 2016. While this loss cannot be entirely attributed to cocoa production, cocoa production is a leading cause of deforestation in Ghana. WRI's Global Forest Watch (GFW), using advanced remote sensing and data analysis, estimated that there was a 60 % increase in primary rainforest loss from 2017 to 2018, the largest increase of any country in the world.

This is creating an important ripple effect: the expansion of mono-culture cacao farms has triggered the conversion of tropical forests for cacao production. Which in turn has led to lower rainfall and rising temperatures that are not only reducing cocoa yields but also affecting subsistence crops – on which smallholder farmers rely. Meanwhile, this breaks the natural cycles in which forests capture CO₂, increase biodiversity and improve soil quality, providing ecosystem services that entire communities benefit from.

The worldwide cacao industry has a significant Dutch flavour, as the Netherlands is the largest importer of cocoa beans via the Port of Amsterdam and home to one of the largest cocoa grinding industries in the world. The Netherlands imported almost 91% of its cocoa beans from West Africa in 2020, primarily as bulk cacao. Many sustainability initiatives were sparked both by the industry itself and in cooperation with government agencies, but the impacts on the everyday lives of smallholder farmers and its contribution to halting deforestation have been limited to date.

Zoom in on the Nestlé Cacao Plan in the Ashanti region in Ghana

For this case study, we zoom into the Ashanti area in Ghana where the Swiss Nestlé has the Nestlé Cacao Plan to build a more responsible cacao supply chain in West Africa. The Nestlé Cacao Plan was launched in 2009 to stop cacao-related deforestation, increase farmers' incomes, ensure high-quality cocoa and address supply chain issues such as child labour, gender inequality and poor social conditions.

Since 2009, 124.000 farmers have joined the program, and this has among others led to a halving of child labour in the cacao value chain in the area, through supporting children, their families and communities to remove children from a situation of risk. The program has also worked on training for smaller groups of farmers – such as 3.000 farmers trained in the adoption of improved cacao farm management practices. In 2020, the programme set itself the target to supply Nestlé with 100% sustainable cocoa by 2025. Nestlé has acknowledged the issue of child labour and has recently earmarked 1.3 billion USD until 2030 to support the transition to child labour free value chains in West Africa.

Nestlé sources its responsible cacao beans from the local cacao trader Beyond Beans Foundation (formerly Cocoanect) in West Africa. Through the finance of Nestlé, Beyond Beans Foundation pays a premium price to cacao farmers that are Rainforest Alliance certified. Beyond Beans Foundation makes sure that the premiums are channelled to the farmers. Ghanaian NGO Tropenbos Ghana is working with Beyond Beans Foundation in the Accessible Soils And Sustainable Environments (ASASE) project in the Ashanti region in Ghana to support climate-smart cocoa and thriving forests.

Monoculture continues to prevail

But what has been the impact of the work of Nestlé and others? The bulk of cacao beans that Nestlé is buying from local traders is still being produced in monoculture plantations with excessive use of chemical fertilizers and pesticides. The Nestlé Cocoa Plan has pushed many cacao farmers in Ghana to shift from monoculture cacao plantations to biodiversity-friendly cacao production schemes to get the Rainforest Alliance certification, despite the high costs of certification and lower production yields of cacao beans.

However, in the Ashanti region, this premium is only given, through its local trader Beyond Beans Foundation, to farmers for the trade of the first 4,500 metric tonnes (about 72,000 bags) of cacao beans. This corresponds to about 4,500 farmers. The supply of certified cacao beans is, however, many times larger, so the majority of cacao farmers receive no premium for the extra work they do to get the beans certified. This means that the livelihoods of the cacao farmers suffer under the low purchasing ceiling of Nestlé, which reduces their motivation to invest in responsible cacao farming.

No longer in the shade

Nestlé has been experiencing failing cacao tree productivity in Ghana for over 30 years. If Nestlé does not invest in the sustainability of cacao production methods, then the company risks a shortage in cacao beans. For this reason, Nestlé's cacao program has been a vested self-interest so far. How can Nestlé come out of the shade and provide the much-needed sunlight to nature and people with its cacao plan?

Simple. As described earlier the supply of certified cacao beans is exceeding the purchasing demand of responsible cacao of Nestlé. For this reason, Nestlé should increase its purchasing ceiling of tonnage certified cacao beans to match the number of farmers that produce responsible cacao beans. This means making more funds available to Beyond Beans Foundation, which can then provide cacao farmers with a premium price for their responsible practices.

Lastly, Nestlé should improve their engagement with cacao farmers by organising gatherings with farmers to let them try the chocolate products that Nestlé makes. Many cacao farmers have never eaten chocolate before. By organising this, Nestlé can show its appreciation to the farmers and take away the bitter taste of chocolate.

Call to action for investors in cacao value chains

In this section, recommendations are given on how investors in cacao value chains can reduce the impact of the sector.

Exclusion:

- Investors in the cacao value chain should consider excluding companies that operate in or nearby protected areas.
- Investors in cacao value chains should consider excluding companies that are engaged in human rights abuses in particular related to child labour.
- Investors in cacao value chains should consider excluding companies that can be linked to deforestation activities.

Engagement:

- Investors in cacao value chains should consider engaging with companies around providing adequate compensation for certified cacao beans.
- Investors in cacao value chains should consider engaging with companies around different cropping techniques that include other shade products.
- Investors in cacao value chains should consider engaging with companies around pesticide and fertilizer use.
- Investors in cacao value chains should consider engaging with companies about gender and equality.

Opportunities:

- Investors in cacao value chains should consider opportunities to invest in companies that produce cacao beans that are certified organic.
- Investors in cacao value chains should consider opportunities to invest in companies that produce by using multi-cropping techniques.

Further learning

- Investors in cacao value chains are invited to support further research in sustainable cacao production, by working together with (local) research organisations and government agencies such as the Cocobod in Ghana.



Salmon Aquaculture

“The Chilean industry’s failure to fully internalize the costs of proper environmental, public health and social safeguards creates an unfair competitive advantage over better-regulated salmon production in other countries, including Norway and the United States. The lack of transparency about the Chilean salmon farmed productive process, affect the consumer’s rights and the international fair trade”, says Juan Carlos Cárdenas, veterinarian, director of the Ecoceanos Center.

The consequences of unsustainable food production extend into aquatic systems. Fish provide 17% of animal protein consumed globally. At the same time, agriculture is the largest source of water pollution, which then runs off into aquatic ecosystems and coastal areas.

Salmon aquaculture reported global production of 2.6 billion tonnes in 2017, valued at US\$ 16.7 billion. Salmon aquaculture, like other edible aquatic organisms including fish, shellfish and aquatic plants are situated within the food system and have both negative and positive externalities.

Aquaculture can have a positive impact on the environment, for example by reducing pressure on overexploited wild stocks, and boosting natural production and species diversity. But the impact of the industry is overwhelmingly negative. For example, species that escape from aquaculture can become invasive in areas where they are not native, effluents from aquaculture can cause eutrophication, ecologically sensitive land may be converted for aquaculture use, aquaculture species may consume an increasingly scarce fish meal, and aquaculture species may transmit diseases to wild fish.

According to FAO, the total reported fish production in 2017 was 53.4 million tonnes, valued at US\$ 139.7 billion, with fish production growing at an average annual rate of 5.7% per year since 2000. Farmed Atlantic salmon is the eighth most important species by volume, with a total reported production of 2.36 million tonnes in 2017, valued at US\$ 16.7 billion.

Although it ranks lower than other aquatic farmed species in terms of production volume and revenue, farmed salmon has come under the spotlight due to the projected growth of the industry as well as its serious animal welfare, environmental, and social externalities.

Four hundred garbage trucks with death salmon – the real price of Chilean salmon

Four hundred garbage trucks filled with dead salmon, the equivalent of 5,000 megatons, which are the result of harmful algae blooms - malignant bloom of the alga which in large quantities can lead to fish mortality - in the Chilean Southern salmon producing region in April 2021. In this case study, we zoom into the Chilean salmon industry. Chile is the world’s second-largest producer of farmed salmon, where growth has been accompanied by and made possible by intensive use of antibiotics, poor welfare conditions, unregulated exploitation of natural resources, and questionable labour practices.

With a coastline of more than 6,000 kilometres, Chile has exceptional conditions for salmon farming. Although first attempts of intensive salmon farming already started in the 19th century, the expansion of salmon farming began in Chile in the mid-1970s, with support from the Pinochet regime and involvement of international knowledge transfer. Today, the industry has become the second Chilean export sectors and a pillar for regional economic development especially in the Patagonian regions. The sector is dominated by a few large companies: including Multiexport who was included in this study.

Despite its financial success the industry continues to negatively affect the environment. For example, via the use of drugs to control diseases, lack of advanced waste handling and water treatment and recycling techniques. With an estimated growth of the industry, it is expected that Chile remains one of the countries likely to meet future global demand for salmon products. The growth of the Chilean salmon industry should be matched with actions that reduce the impact of the industry on the environment and people.

Improving animal welfare standards in the Chilean salmon industry

World Animal Protection is working together for this case study with Centro Ecoceanos - on environmental, social, and animal welfare components of the industry. For animal welfare, this means that at a minimum mandatory and transparent reporting of antibiotic use, and a ban on the use of critically important and important antibiotics (as determined by the World Health Organisation).

On the environmental side, farming of carnivorous species, such as salmon, requires the use of fishmeal and fish oil in feed. These ingredients are sourced from wild-caught fish, linking the expansion of aquaculture to the depletion of wild fish stocks. Fishmeal and fish oil prices are volatile, and production is sensitive to climate risk. A study by UBS, a Swiss multinational investment bank and financial services company, found that substituting fishmeal and fish oil for plant-based foods such as soybeans could help alleviate the effects of climate change for fish farms. Although soybeans have been linked to deforestation as well.

On the social side, there are serious and well-documented concerns that the rapid growth and perceived competitive advantages of the Chilean salmon industry are largely sustained by poor labour conditions. Multiple studies over the past two decades have documented low wage levels, salaries with high variability aimed at extending work schedules beyond legal limits, as well as non-existent or poorly enforced health and safety standards. The latter has resulted in multiple worker deaths. In addition, gender disaggregated studies done on the island of Chiloé, in the South, demonstrate that factors restricting women's participation in labour force and wage differences between women and men.

Pathways to a sustainable future

Seafood can contribute to resilience whilst at the same time providing protein more sustainably. To sustain this business entails a critical review of current practices on a case-by-case basis, consider a moratorium on salmon farms pending the implementation of a reform plan which considers animal welfare and climate change. As a next step, World Animal Protection will be working to evaluate financing against animal welfare standards for salmon. Chilean salmon producers should consider working together to tackle deforestation in their value chains, in line with Norwegian salmon producers who have accomplished deforestation and conversion free supply chain from Brazil.

Financial institutions can play a key role in the transition of the salmon industry towards a greener future, through engagement with companies in the sector on the environmental, social and animal welfare topics, by excluding companies that have proven to be deaf to their demands, and by actively looking and investing in companies that operate and balance with the environment.

Call to action for investors in salmon aquaculture value chains

In this section, recommendations are given on how investors in salmon aquaculture can reduce the impact of the sector.

Exclusion:

- Investors in salmon aquaculture should consider excluding companies that operate in or near vulnerable and protected areas.
- Investors in salmon aquaculture should consider excluding companies that are engaged in human rights abuses based on an indicator such as the number of incidents related to worker safety, including worker deaths.
- Investors in salmon aquaculture should consider excluding companies that do not follow minimum animal welfare standards.

Engagement:

- Investors in salmon aquaculture should consider engaging with companies in the value chain to limit the use of fishmeal and fish oil in feed.
- Investors in salmon aquaculture should consider engaging with companies in the value chain about deforestation related impacts due to use of soybeans.
- Investors in salmon aquaculture should consider engaging with companies in the value chain to limit the use of antibiotics.

Opportunities:

- Investors in salmon aquaculture should consider opportunities to invest in companies that produce salmon aquaculture that is certified organic.
- Investors in salmon aquaculture should consider opportunities to invest in companies that produce circular salmon aquaculture.

Further learning:

- Investors in salmon aquaculture are invited to support further research in sustainable salmon production, such as WorldFish (www.worldfishcenter.org).



Maize

“To produce meat, milk and eggs, we need an incredible amount of wheat, maize and soy. If people just ate these crops directly, our needs would be much less – and the planet would thank us. We would also have plenty of food to meet the demands of the ever-growing world population. Plus, we could meet these needs using less agricultural land.” According to the philosophy of Kipster, a Dutch chicken farm that combines the highest standard of animal welfare with closed-loop farming. This means Kipster feeds its chickens not maize and soy, but waste streams, for example from bakeries. Inherently, the closed-loop farming philosophy dictates a largely plant-based diet, complemented with only limited amounts of animal products. As such, Kipster is a unique laying hen farm: it argues for less egg production.

Maize is the world’s most-produced grain crop, according to the FAO based on production in metric tons³⁵. In terms of acreage, it is the world’s second crop, using 205 million hectares. Which is larger than Alaska, and is around equivalent to the Congo Basin which makes up one of the most important wilderness areas left on Earth.

Hundreds of varieties

White, black, blue, red, yellow. There are hundreds of variations of maize, which is originally from Mexico, one of the world’s most biodiverse countries. It is used for animal feeds, ethanol production, fibre production, food production, and other industrial uses. Imagine, an average grocery store will sell about 4,000 products with ingredients that came from maize.

Unlike wheat, which is mainly produced to feed humans, maize is predominantly used for animal feed. The most prominent maize-producing countries are the US, China and Brazil, which together produce 64% of the world’s maize. Argentina and Ukraine are also major maize producers.

As a crop, maize is highly productive, flexible and successful. Due to government interference, for example in the US, maize prices have stayed stable whilst production has grown rapidly. This has led to cheap high fructose maize syrup and bio-ethanol finding their way to the market. If every car in the US were to be running pure maize-based ethanol, it would require around 97% of the nation’s land area to produce the necessary amount of maize. At the same time, you could feed seven people for a year on the maize it would take to fuel a single car during the same period.

The silent deforested

The vast Cerrado grasslands of Brazil continue to be cleared to plant maize and soybeans and to raise cattle. But the destruction has been so extensive that it has sparked a change in the local climate, making the region increasingly unsuited for maize farming. But impacts are not limited to Brazil alone, for example in the US, maize production is the biggest driver (25%) of the disappearance of the unique grasslands of the Great Plains.

Maize production is one of the great contributors to land conversion, leading to deforestation and the loss of wetlands. Globally, maize is the second largest crop to contributed directly or indirectly to deforestation (11%) after soy (19%), but before oil palm (8%), rice (6%), and sugar cane (5%).

Next to the link to deforestation, environmental impacts of maize production include terrestrial and marine ecosystems due to the extensive use of fossil fuel-based fertilizers and agrochemicals. Fertilizers used for maize production and manure excreted by maize-fed livestock causes pollution of water and land with excessive nitrogen and phosphates, creating, inter alia, dead zones in the marine environment of coastal regions. Pollution of ecosystems with agrochemicals causes declining animal populations. Industrial livestock production reliant on maize is associated with a plethora of animal welfare problems, including close confinement, mutilations, and excessive breeding for production traits.

Social considerations

Maize production is heavily subsidized and subsequently, to get rid of surpluses, dumped on the world market, foremost by the US. This undermines the economic viability of farmers in other countries, especially for developing countries that rely on agriculture. In Mexico over 2 million smallholder farmers – 25% of the total farmers – lost their livelihoods following the NAFTA agreement. In addition, the control of (hybrid and GM) maize seed (and its accompanying agrochemicals) by multinational seed companies puts farmers in a disadvantaged position, especially farmers committed to agroecological approaches.

Maize production is linked with several health risks. At the production level, pesticide use is a health risk, especially to farmers. When maize is used in livestock production, maize is associated with health risks, including zoonoses and ammonia emissions. At the consumption level, especially in the US, the so-called ‘maizefication’ of the food system runs parallel with the rise of obesity and related diseases. To a large extent, fast food is built on maize.

Limited corporate responsibility

Maize production is monopolized by a few companies. As a result of its diverse use, many companies rely directly or indirectly on maize. For example, Walmart, the biggest company in the world, sells a myriad of products (in)directly linked to maize. Until now, Walmart has placed the responsibility of impact with its suppliers. Walmart has set goals for suppliers to reduce deforestation linked to palm oil, pulp and paper, soy, and beef. But this does not consider maize. In its 2019 report to CDP, Walmart said that it did not have a system in place to track and monitor the origin of its key commodities because implementing such a system was not “an immediate business priority.”

Walmart is also a big business partner of Tyson Foods, the world’s second-largest processor and marketer of animal-based products, such as chicken, beef and pork. Maize processor ADM made huge profits in 2021, as a result of the increased need for bio-ethanol, which consist of maize as the main ingredient. They are a global company and also one of the biggest maize exporters of the USA. MHP is the biggest Ukrainian company, specialized in chicken production and other agricultural products to feed their animals, also containing maize

Circular Solutions

The solution is simple. Natural resource use and emissions associated with modern food systems can be significantly reduced by shifting towards a circular food system, as the example of Kipster have shown. Although Kipster hasn’t been able yet to completely stop using maize, the vast majority of their feed input is devoid of maize and, instead, consists of recycled food waste. By decreasing reliance on animal-based foods and the corresponding increase of plant-based foods (halving global animal production by 2040). In such a system, maize is primarily grown to feed humans. Growing maize for feeding livestock and cars does not fit into such a circular food system and needs to be minimalized if not abandoned. In that way, maize acreage can be decreased, freeing up land for nature and biodiversity-inclusive ways of food production such as permaculture and food forests. And in this way, we can grow feed for humans, not cars and livestock.

Call to action for investors in maize value chains

In this section, recommendations are given on how investors in maize value chains can reduce the impact of the sector.

Exclusion:

- Investors in the maize value chain should consider excluding companies that operate in or nearby protected areas.
- Investors in maize value chains should consider excluding companies that can be linked to deforestation activities.

Engagement:

- Investors in retail corporations, such as Walmart, should consider highlighting the impact of maize value chains on deforestation in their engagement activities.
- Investors in maize value chains should consider engaging with companies around the welfare of industrial livestock.
- Investors in maize value chains should consider engaging with companies around pesticide and fertilizer use.

Opportunities:

- Investors in maize value chains should consider opportunities to invest in companies that produce by using circular production systems.

Further learning:

- Investors in cacao value chains are invited to support further research in maize cacao production.

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- ³¹ OECD Responsible business conduct for institutional investors. Key considerations for due diligence under the OECD Guidelines for Multinational Enterprises, 2017, p.19.]
- ³² UNGP 19, OECD Responsible business conduct for institutional investors (2017), 2.3, p. 32, 33.).
- ³³ <https://www.climatebonds.net/standard/agriculture>
- ³⁴ FAIRR (2022, 28 February), *E-mail correspondence with Riemersma Research*.
- ³⁵ <https://www.fao.org/faostat/en/#data/QV>

Annex 1 Company information

In this section information is given about the researched companies:



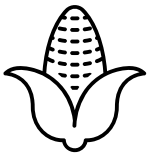
Retail

Walmart: Walmart Inc. is an American multinational retail corporation that operates a chain of hypermarkets (also called supercentres), discount department stores, and grocery stores from the United States.

Walmart has been collaborating with others to drive positive impact across global supply chains. As part of its strategy, Walmart writes on its website that it is committed to sourcing seafood sustainably through their Seafood policy and participating in the Seafood Task Force to address illegal fishing in the Thai seafood supply chain.

As a very visible company Walmart has been involved in a number of sustainability-related scandals recently. For example, it would only sell wild fish that had been certified sustainable by the Marine Stewardship Council, or its equivalent, starting in 2012. The resulting outcry from Alaska's fishermen, legislators and scientists prompted Walmart to reconsider. The company agreed to take a second look at other sustainability standards besides MSC. A number of investors have blacklisted Walmart because of labour rights issues.

Maize



ADM - Archer-Daniels-Midland Company: The Archer-Daniels-Midland Company, commonly known as ADM, is an American multinational food processing and commodities trading corporation founded in 1902 and is from the United States. According to the ADM website; "in a world where the population is estimated to reach 9 billion by 2050, will require twice of food and energy produced today.

Although it is working on biofuels and innovation, it has faced hundreds of millions of dollars' worth of lawsuits for various types of pollution. According to Newsweek, it has a big environmental impact and a below-average reputation.

In 2021 ADM made huge profits 2021, in part due to the increased need for bio-ethanol, which consist of corn as the main ingredient. This had catastrophic impacts on biodiversity in regions such as Brazil, where corn exploitation is expected to grow in the next 10 years. They are a global company and also one of the biggest corn exporters in the USA.

MHP: MHP is Ukraine's largest agricultural production company, based in the small city of Myronivka, Kyiv Oblast, with over 50% of the country's "industrially produced poultry". The study into MHP was conducted before the Russian invasion of Ukraine, and it is unclear at this moment how this has impacted the investment in the company to date. There is no information available (in English) about the sustainability profile of MHP. MHP uses threats and intimidations against activists opposing their operations' harmful environmental and social impacts.

Long Ping High-Tech: Yuan Long Ping High-Tech Agriculture Co., Ltd. (referred to as “Long Ping High-Tech”) was officially established in Changsha, Hunan Province in 1999. According to their website the company is being seen as the “Chinese seed industry credit star enterprises” for many years, known as “the first brand in the Chinese seed industry”. In January 2016, CITIC Group became the largest shareholder of Long Ping High-Tech through its three subsidiaries. In 2017, Long Ping High-Tech has become one of the TOP 10 seed companies in the world. There is no information available (in English) about the sustainability profile of Long Ping High-Tech. There is no information available (in English) about the sustainability scandals that involve Long Ping High-Tech.

Tyson Foods: Tyson Foods, Inc. is an American multinational corporation based in Springdale, Arkansas, that operates in the food industry. According to its website, Tyson foods works to find a way to feed an additional 2 billion people. In 2016, Tyson Foods bought a 5% stake in the meat alternative company Beyond Meat, becoming the first major meat producer to invest in a meat alternative company.

Tyson Foods has been involved in several controversies related to the environment, animal welfare, and the welfare of its employees. Tyson Foods Inc. and six of its slaughterhouse workers face charges of 33 counts of criminal animal cruelty after they were captured on hidden camera by a Mercy For Animals investigator violently punching, throwing, and maliciously torturing animals for fun. Tyson faces community resistance to the expansion of its operations and footprint to meet the growing demand for protein.

Salmon aquaculture



Mowi ASA: (formerly known as Marine Harvest ASA) is a leading Norwegian seafood company with operations in a number of countries around the world including Scotland, Canada, the Faroe Islands, Ireland and Chile. Their primary interest is fish farming, primarily salmon, and they have a share of 25-30% of the global salmon and trout market. Mowi is the largest producer of farmed Atlantic salmon in the world. Mowi is listed on the Oslo Stock Exchange and its shares also trade on the US OTC market.

According to its website Mowi is committed to feed a growing population whilst more food from the ocean thus meeting the demands of a growing population while respecting the planet and helping local communities to flourish. This has not permitted than in Chile, as a result of Mowi's, millions of fish have died by the disease infectious salmon anaemia. The rapid propagation of the virus has motivated the enterprise to sell some of its facilities, firing more than a thousand employees.

Leroy Seafood Group ASA (Leroy): is a subsidiary of Austevoll Seafood ASA, is an integrated seafood company. The company's core business is the production of salmon and trout, catches and processing of whitefish. The company operates production and packaging plants in Norway, Denmark, Sweden, Finland, the Netherlands, France, Portugal, Turkey, and Spain.

Leroy's sustainability actions include the collection of plastics by fisherman, and the membership of a number of sustainability initiatives including the Aquaculture Stewardship Council (ASC) for a number of its facilities.

Multiexport Foods: rebranded as Multi X in September 2021 is a Chilean aquaculture company. The company exports to Japan, the United States, Central Europe and Russia, as well as China, Korea, Southeast Asia and Latin America. Multiexport's products include Atlantic Salmon, Salmon Trout, Smoked Salmon, and mussels. The company reported revenues of US\$ 518 million for the fiscal year ended December 2020 (FY2020).

Multiexport became the first Chilean salmon farmer to receive the Group Certification of Best Practices in Aquaculture (BAP) granted by the Global Aquaculture Alliance (GAA). The company is accused of workers abuse.

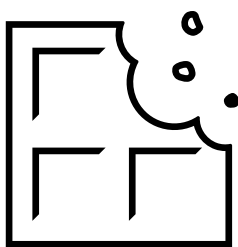
Grieg Seafood ASA: is a fish farming and distribution company that specializes in farming of Atlantic salmon. The company's business operations primarily include the production and trade of salmon and trout. Its product portfolio includes fresh whole fish, fresh processed fish, frozen processed fish, frozen whole fish, and other products. Grieg Seafood holds several licenses for the production of salmon. It distributes and supplies seafoods through its joint venture Ocean Quality AS. The company reported revenues of (Norwegian Krone) NOK4,384.4 million for the fiscal year ended December 2020 (FY2020), a decrease of 47% over FY2019. Grieg operates in Norway, Canada (British Columbia), and the United Kingdom (Scotland). Grieg's current production goal is to harvest 130,000 tonnes by 2025.

Grieg is a taskforce member of the TNFD. They are also committed to various other sustainability initiatives.

Aqua Chile: is a Chilean-based salmon producer. In 2020, the salmon farmer produced 260,000 tonnes of fish (WFE) in 2020, 248,000 of which was salmon (Atlantic, coho and trout), with the rest being tilapia. Its biggest markets were Chile, USA, Russia, Japan and Brazil. The company reported revenues of US\$ 131 million for the fiscal year ended December 2020 (FY2020).

In 2019, AquaChile partnered with WWF to bring sustainability certification to southern operations.

Cocoa



Mondelez International: is an American multinational confectionery, food, holding and beverage and snack food company based in Chicago, Illinois. Mondelez has an annual revenue of about \$26 billion and operates in approximately 160 countries. It ranked No. 108 in the 2021 Fortune 500 list of the largest United States corporations by total revenue.

The company claims that since the creation of Mondelēz International in 2012, it has been setting ambitious goals for its programs in sustainability and nutrition and is committed to regularly and

transparently reporting our progress. However, the company is involved in various sustainability scandals. In September 2017, an investigation conducted by NGO Mighty Earth found that a large amount of the cocoa used in chocolate produced by Mondelez and other major chocolate companies was grown illegally in national parks and other protected areas in Ivory Coast and Ghana. In 2021, Mondelez International was named in a class action lawsuit filed by eight former child slaves from Mali who allege that the company aided and abetted their enslavement on cocoa plantations in Ivory Coast.

Nestlé S.A.: is a Swiss multinational food and drink processing conglomerate corporation headquartered in Vevey, Vaud, Switzerland. It is the largest publicly held food company in the world, measured by revenue and other metrics, since 2014. It ranked No. 64 on the Fortune Global 500 in 2017 and No. 33 in the 2016 edition of the Forbes Global 2000 list of largest public companies. The company's many corporate social responsibility programs include the Nestlé Cocoa Plan.

The company has been associated with various controversies, facing criticism and boycotts over its marketing of baby formula as an alternative to breastfeeding in developing countries (where clean water may be scarce), its reliance on child labour in cocoa production, and its production and promotion of bottled water. With regards to cocoa, multiple reports have documented the widespread use of child labour in cocoa production, as well as slavery and child trafficking, throughout West African plantations, on which Nestlé and other major chocolate companies rely. In September 2017, an investigation conducted by NGO Mighty Earth found that a large amount of the cocoa used in chocolate produced by Nestlé and other major chocolate companies was grown illegally in national parks and other protected areas in Ivory Coast and Ghana.

The Hershey Company: commonly known as Hershey's, is an American multinational company and one of the largest chocolate manufacturers in the world. It also manufactures baked products, such as cookies and cakes, and sells beverages like milkshakes, and many more that are produced globally. It was founded by Milton S. Hershey in 1894 as the Hershey Chocolate Company, a subsidiary of his Lancaster Caramel Company. The Hershey Trust Company owns a minority stake but retains a majority of the voting power within the company.

Hershey has been criticized for not having programs to ensure sustainable and ethical cocoa purchases, lagging behind its competitors in fair trade measures. In 2019, Hershey announced that they could not guarantee that their chocolate products were free from child slave labor, as they could trace only about 50% of their purchasing back to the farm level. In 2021, Hershey was named in a class action lawsuit filed by eight former child slaves from Mali who alleged that the company aided and abetted their enslavement on cocoa plantations in Ivory Coast.

Chocoladefabriken Lindt & Sprüngli AG: more commonly known simply as Lindt, is a Swiss chocolatier and confectionery company founded in 1845 and known for its chocolate truffles and chocolate bars, among other sweets.

In September 2017, an investigation conducted by NGO Mighty Earth found that a large amount of the cocoa used in chocolate produced by Lindt and other major chocolate companies was grown illegally in national parks and other protected areas in the Ivory Coast and Ghana.

Meiji Co Ltd: is a Japanese food company. It was a major dairy industry company established in 1917. Apart from dairy products like milk, ice cream, and cheese, sports drinks, pizza, chocolate bars and food supplements like "Toromeiku", described as a "food viscosity preparation". It has a joint venture in Thailand with Charoen Pokphand to market dairy products. As part of its sustainability profile it claims to contribute to the health and happiness of people around the world.