

Food's impact on biodiversity is a matter of quantity, not symbols

Frederic Bach, Head of ESG and Responsible Investment
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The food sector is at the core of the biodiversity issue

The agri-food sector has a significant impact on biodiversity. The industry is responsible for a quarter of GHG emissions and exploits half of the world's habitable land. It is also a sector highly dependent on biodiversity services. For instance, the almond industry relies on bee pollination. The increasing use of pesticides and lack of flowering plants have caused a drop in bee colonies in California, which concentrates 80% of the world's production. Without bees on their farms, almond producers have been forced to import colonies from other places.

Demographic trends and changing consumer preferences present an increasingly challenging obstacle to reversing the industry's biodiversity footprint. Food demand will keep growing as the global population rises. Furthermore, consumer preferences shifting to include a larger share of animal protein may lead to an increased environmental footprint.

Limits to existing approaches on biodiversity

Until recently, the tools and metrics used to measure biodiversity loss were incomplete and incompatible with investors' traditional approach to assessing a company or a portfolio's expected performance. They could not be used for extra-financial screening.

Consequently, the financial sector had mostly invested in biodiversity through projects, where it could assess the biodiversity outcomes pertaining to local ecosystems, or via a thematic approach targeting companies that offered products or services aiming to stop or even reverse biodiversity loss.

For instance, alternative proteins have recently come to the fore as a preferred target for green-tech startups such as Ynsect or Agronutris. The amount of food thus currently produced is however negligible, and often used as feed for cattle anyway, which has other environmental consequences. It is too little, too soon to offer a solution to the looming food issue.

An innovative way to assess companies' biodiversity impact

New techniques have helped pioneer the integration by investors of biodiversity in their portfolios. On the one hand, the development of innovative biodiversity measurements has given them the tools to measure species abundance, ecosystem intactness, and ecosystem benefits. Notably, academia has been able to develop robust quantitative and physical indicators that can measure species richness in an ecosystem. One science-based metric compares the actual abundance of native species in a given ecosystem to their estimated abundance if that same ecosystem was in an undisturbed state. This ratio, called the Mean Species Abundance (MSA), ranges from 0 to 1, where 1 indicates that the diversity of species is intact while 0 conversely purports that all native species are extinct.

In addition, academia has developed frameworks that effectively model a safe operating space for humanity to operate within Earth systems, such as the planetary boundaries. This concept, developed by the Stockholm Resilience Centre, has set biosphere integrity (which considers loss and extinctions) as a core planetary boundary for the functioning of Earth systems.

The coupling of the planetary boundaries with the MSA provides investors with a scientifically established target to keep the footprint of investments, from projects to portfolios, aligned with a healthy and functioning biosphere.

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An Investment proposition in the food space

Ossiam's investment proposition aims to extract a portfolio of equities from one of the most impactful sectors on biodiversity, agri-food, while minimising its footprint and keeping it aligned with the latest estimated planetary boundaries.

The investment universe is comprised of 250+ large publicly listed equities that are active in the agriculture and food sector. Unlike more confidential recent ventures, these companies actually contribute to feeding the world's expanding population. Portfolio construction comprises three steps and targets minimising the biodiversity footprint.

First, it applies a best-in-class filter within each of the four subsectors, where the worst performing stocks on an aggregated score that considers biodiversity, ESG, and GHG emissions are eliminated.

Next, a normative exclusion filter is applied whereby companies involved in controversial sectors such as tobacco and palm oil production, and those that are in breach of international business standards are removed from consideration.

The strategy has the objective of minimising its MSA while implementing financial and extra-financial requirements. The process will therefore then constrain the MSA indicator to the threshold needed to remain within the planetary boundaries while performing an improvement of Sustainable Development Goals (SDG) scores compared to the agri-food sector, and reducing the absolute carbon footprint to a level compatible with a 2° alignment scenario.

In summary, this systematic quantitative approach results in a concentrated and stable list of 50 stocks that is evenly spread across the sub-sectors of the food supply chain. The companies that make it through the selection process might not herald disrupting the sector, but they do pull their weight in putting food on many a table.

Further impact through engagement

The place of biodiversity in the financial sector goes beyond the investment process. Through engagement and voting, investors are in a position to drive change within organisations. Their efforts are essential to mitigate related risks and counter companies' negative impact on biodiversity. Moreover, they can combine efforts on an ambitious sustainability agenda that could enable the provision of food for the growing human population while reversing the global terrestrial biodiversity trends by the middle of the century.

Ossiam stewardship efforts target a "sustainable food sector" and address environmental, social, and governance topics.

On the environmental front, we collaborate with leading experts on the ESG risks of food production through an initiative that considers the impact of protein products on portfolios, and through another initiative that promotes sustainable sourcing of feed for salmon producers.

On the social side, Ossiam has started an engagement program with the food sector to promote healthy foods. Ossiam urges companies to embrace their role in fostering health through their offering, by enhancing the nutritional value of the product portfolio and through the adoption of responsible business practices.

On the governance side, Ossiam is co-leading an engagement programme on sound practices related to biodiversity. This initiative merges the expertise of a proxy voting advisor firm with Ossiam's own knowledge of issues related to biodiversity. Our objective is for the topic to be integrated in the governance practices of companies in the food sector. The initial stage will seek to promote the use of biodiversity metrics in companies' remuneration policy.

Looking forward

To fully blend biodiversity issues in the financial sector, we need to address two crucial challenges investors are currently facing: data availability and a global target framework to counter biodiversity loss.

As companies disclose biodiversity-related data, investors will be able to integrate this information in their decision-making process. Data availability should improve the ability to assess companies within their sector and to compare sectors.

There is currently no established global target to halt biodiversity loss in a way there is a global target to limit global warming, resulting from the Paris agreement of 2015 and adopted by most of the world's nations. A globally accepted science-based target to halt biodiversity loss would provide a useful alignment framework for investor activities.

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