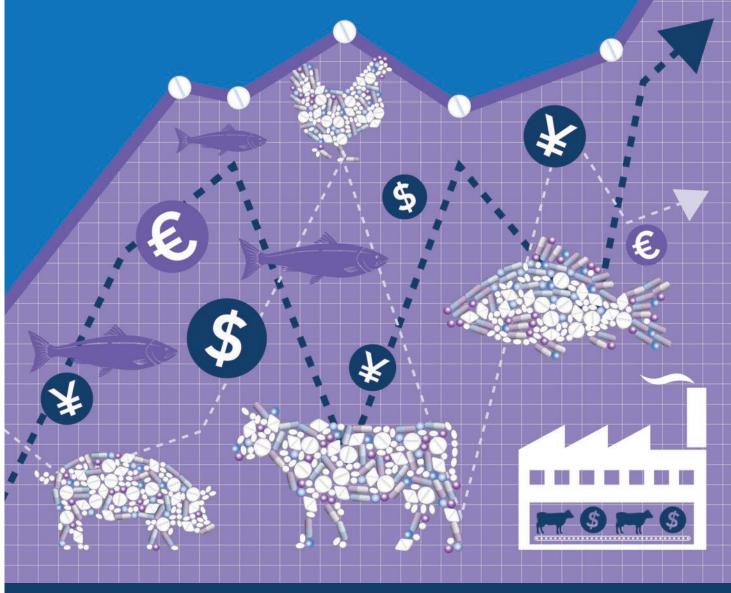


INVESTOR CASE STUDIES VOLUME TWO



CONTENTS

FOREWORD	,
EXECUTIVE SUMMARY	:
Good practice tips	;
THE CASE STUDIES	
Robeco Asset Management: Farmed animal issues part of the next ESG frontier	
International Finance Corporation: Good animal welfare is good business	
Australian Ethical Investment: Intensive animal farming as a no-go industry	1
Cornerstone Capital Group: Inquiries, injections and investment opportunities	1:
ACTIAM: Engaging to change meat production	1
Impax Asset Management: Animal welfare is a key consideration for a sustainable food and agriculture investment strategy	18
Kames Capital: Intensive farming can feature across the board – from exclusions to engagement	2
Coller Capital: An issue coming to the fore in private equity	2
New Crop Capital: Ripening \$6bn alternative protein market ready for picking	2
Ethical Screening: Enabling investors to opt out of intensive farming	20
SASB PUTS INTENSIVE FARMING ISSUES ON THE MAINSTREAM ENGAGEMENT AGENDA	2
ABOUT THE FAIRR INITIATIVE	3



ABOUT US

The FAIRR Initiative is a collaborative investor network. It aims to raise awareness of the material impacts that factory farming can have on investment portfolios and works to help investors share knowledge and form collaborative engagements on issues related to factory farming. fairr.org

FOREWORD

The mission of the Farm Animal Investment Risk & Return (FAIRR) Initiative is to raise awareness amongst investors about the financial risks and opportunities associated with intensive farming. From worker safety to waste spills, threats to human health to threats to our environment, the environmental, social and governance (ESG) risks related to the intensive farming model mean the sector needs profound change if it is to be sustainable.

FAIRR's first investor case study booklet was published in June 2015 and the response has been remarkable. Our initial print run disappeared within a month and the demand from investors for these practical examples and steps to take to help consider intensive farming issues in the investment process, shows how quickly this issue is rising up the investment agenda.

Perhaps most encouragingly, other investors came forward after the publication of the first booklet to offer examples of how they are adapting their portfolios to capture risks and opportunities in this area. It was this momentum that has enabled FAIRR to publish this second volume of case studies.

Once again we are delighted to present a wide range of investors from different regions and different asset classes and extend our appreciation to all those who have contributed.

We hope investors who are considering this issue for the first time can find valuable insights from this shared knowledge and we encourage them to also consider these issues in their investment process.

We hope you find it an informative and interesting booklet.



Jeremy Coller
Founder, FAIRR Initiative
and CIO, Coller Capital



Alan Briefel
Executive Director,
FAIRR Initiative



FAIRR CASE STUDIES, VOLUME 1

This booklet is part of a series. Volume 1 is freely available via fairr.org and features case studies from: Alliance Trust, Allianz, Aviva Investors, Boston Common Asset Management, Craigmore Sustainables, Rathbone Greenbank, Southern Pastures, University Superannuation Scheme (USS) and Vigeo Rating.

EXECUTIVE SUMMARY

Many investors now acknowledge the sustainability issues that surround the growth of intensive farming around the world. But what practical steps can investors take to ensure any risks and opportunities emanating from this trend are accounted for in investment decisions?

This booklet showcases how ten leading investors and investment service providers are seeking to answer this question.

Some apply a negative screen to simply avoid any exposure to factory farming, while others seek to use their influence to improve behavior – through engagements, side letters or benchmarking tools.

No matter what the approach, the message from all the investors interviewed is clear: Factory farming and farm animal welfare have become vital considerations in any investor assessment of the agricultural or food sectors.

PRESERVING CAPITAL, GENERATING RETURNS

On the risk management side, there are many examples in this booklet of where investors have identified significant downside risks from intensive farming – such as antibiotic overuse, climate change and food safety – and acted to avoid loss of value. For example, Robeco has recently undertaken 'deep dive' research on this topic and identified 11 portfolio companies with high levels of exposure to intensive farming who they expect to work with over the next few years to help manage the risks.

On the opportunity side, there continues to be several examples of far-sighted investment strategies that hope to benefit from potential changes as the world moves towards a more sustainable food system. For example, New Crop Capital only invest in companies developing alternate and sustainable proteins – a sector which is set for explosive growth over the next 5–10 years. Both Robeco and Cornerstone have identified specialty feeds either to reduce methane emissions or to reduce the need for antibiotics as areas of growth.

Since the last FAIRR case study booklet was published in June 2015, the world has seen both the landmark Paris climate agreement and adoption of new Sustainable Development Goals by the UN. Both of these set a clear ambition for the world to develop a genuinely sustainable food system.

These case studies show that many leading investors are already acting and those investors who are not risk being left behind.

GOOD PRACTICE TIPS

So what are some of the quick tips that investors can take from the best practice shared in this booklet? We offer eight quick suggestions:

- 1. Bad welfare leads to value destruction...

 Several investors spoke of research or examples
 - that showed how poor animal welfare practices could lead to loss of returns either in the short or longer term. For example, **IFC** research shows that poor handling of pigs can reduce growth by 11% and reduce pregnancy rates by 62%.
- 2. ... while good welfare and a sound approach to sustainability attracts sustainable investors. Investors such as ACTIAM and Impax both argue that robust policies on sustainable farming can be key drivers of value. For example, Impax has invested in salmon farms in Norway as their high environmental and social standards give them long-term growth potential.
- 3. BBFAW to the fore. The Business Benchmark for Farm Animal Welfare (BBFAW) continues to be a popular and valuable tool for investors. Investors such as Australian Ethical use it to judge how major food companies are managing and reporting on farm animal welfare practices while Coller Capital uses its methodology as a basis for some of their due diligence criteria.
- 4. A food tech revolution? Investors such as New Crop Capital see strong growth prospects for alternative protein producers. They predict that the global meat substitutes market will grow by around 7.5% a year over the next five years.
- **5.** Seeing positive outcomes from active ownership. Many investors outlined their use of engagement to create better results on this issue. For example, ACTIAM recently backed a shareholder proposal at US meat giant Tyson Foods calling for better disclosure of potential financial risks and 'impacts' of using gestation crates in pork production. This sent an important signal to the company. Several interviewees

- also backed the recent FAIRR collaborative engagement on antibiotics¹.
- 6. Using investor influence to affect the value chain. Engagement doesn't always have to be direct. Coller Capital, the leading private equity secondaries firm often uses its influence with General Partners, including use of ESG policies and side letters, to improve farm standards rather than engaging with companies directly. Cornerstone offers a service that includes assessing fund managers on their understanding of these issues.
- 7. Group think. Internal communications on this issue can be very valuable. For example Kames' sustainability team, who are part of the wider Aegon Group, share any important sustainability risks that they unearth as part of looking at issues like intensive farming across the wider Group.
- 8. Intensive farming isn't just a land-based issue.

 Aquaculture features prominently in the analysis of many investors, with the world's fisheries 50% over exploited, according to Australian Ethical. Sustainable aquaculture is an area several investors are looking to for growth in the coming years.

 fairr.org/news-item/1-trillion-investor-coalition-demandscorporate-action-on-systemic-overuse-of-antibiotics-press-release

2 | EXECUTIVE SUMMARY EXECUTIVE SUMMARY

Emissions from meat production have gone under the radar to date but that is changing

PETER VAN DER WERF, ROBECO

Regulatory oversight is expanding across the food supply chain, and consumers tastes are changing to demand both better welfare and food safety standards.

JOHN HATTON, IFC

The risks surrounding the overuse of antibiotics in animal agriculture are simply too big to ignore

ELLA MCKINLEY, AUSTRALIAN ETHICAL

Consumer-demand for low fat protein and pollution from intensive farming models, including regulatory trends to control it are key drivers of value in our food and agriculture strategy

In the long term animal agriculture is linked to a number of negative environmental impacts including significant greenhouse gas emissions, water scarcity and deforestation.

ELENA VIKMANE, ETHICAL SCREENING

If the alternate meat market can mirror the success of the alternative milks market, the industry in the US alone will be worth more than \$16bn in the next 10 years

BRUCE FRIEDRICH, NEW CROP CAPITAL

ASSET MANAGEMENT

The negative impacts in terms of human health, emissions and the potential consumer backlash to animal cruelty are becoming major concerns to investors

ADAM BLACK, COLLER CAPITAL

Issues of animal welfare and intensive agriculture are linked to all three of our key themes

KRISTEL VERHOEF, ACTIAM

There are opportunities for companies specialising in product reformulation or that produce healthier alternatives

RYAN SMITH, KAMES CAPITAL
(SUBSIDIARY OF AEGON NV GROUP)

Factory farming is an important issue which is moving away from the niche to the mainstream

MICHAEL SHAVEL, CORNERSTONE CAPITAL

IMPAX

Asset manager perspective

ROBECO: FARMED ANIMAL ISSUES PART OF THE NEXT ESG FRONTIER

Robeco Asset Management, subsidiary of Robeco Group, is one of the world's largest sustainable asset managers, with approximately US\$300bn in assets under management for the group. Based in the Netherlands, Robeco was an early signatory to the PRI and has sustainable investing as one of its strategic pillars.





Every year Robeco undertakes a consultation with a range of stakeholders to identify three material ESG topics for the year ahead which require deep dive research to better understand the risks and opportunities. Last year Robeco identified farm animal welfare as one of these three issues for 2016 and they have been exploring these in depth to inform both portfolio management and engagement activities.

Engagement Specialist Peter van der Werf explains why Robeco chose farm animal welfare as their key social issue, "Societal megatrends such as the growing global population and increased wealth in developing world are driving demand for more meat protein. However this puts a lot of strain on natural resources. On top of that, meeting this demand is creating negative environmental impacts such as unsustainable levels of carbon emissions and waste. We expect that governments in many countries will need to redefine laws and cut subsidies around meat production. However, this will take a significant amount of time and timing is difficult to predict. If you couple that with increasing insistence in the developed world for good quality meat and high welfare standards, you have large risks and opportunities that the meat producers, processors and retailers need to act on. We believe these risks to be highly material for the companies and their reaction can result in positive value creation for shareholders."

ENGAGING WITH FOOD AND BEVERAGE COMPANIES

Although Robeco's deep dive research on this topic is ongoing, it has already begun to raise issues of animal welfare and intensive farming with investee companies, usually as part of other dialogues. For example, van der Werf explains, "A European retailer and supermarket chain told us that it regards farm animal welfare as the next ESG frontier to understand and implement higher standards for."

Robeco has identified 11 companies within its portfolio that have high levels of exposure to issues of animal welfare and intensive farming, and it expects to work with them over the next few years to address the issues identified in research.

ADJUSTING ANIMAL FEEDS TO COMBAT CLIMATE RISK

Robeco believes that for almost every ESG risk, there is also an opportunity, and one of its investment strategies is to invest in companies whose products provide solutions or mitigate risks.

Within agriculture, Robeco sees significant opportunities through biotechnology and specialty chemicals that can be added to animal feed to help tackle emissions from the sector.

Van der Werf says that although specialty chemicals are currently a niche area, they expect emissions from



A European retailer and supermarket chain told us that it regards farm animal welfare as the next ESG frontier to understand and implement higher standards for.

animal agriculture to come under increasing scrutiny and regulation. Creating a growing market for products that reduce animal emissions. He explains: 'Emissions from meat production have gone under the radar to date, but that is changing. In a recent meeting we presented our environmental research on how oil majors are adapting their business models to cope with climate change and one client responded, 'but what about agriculture?' So we see this as an area for close attention that will gain more traction over the next five years."

Regulators have a key role to play in reducing emissions from the agriculture sector argues van der Werf. "At a certain point we expect legislators to act as the Dutch government did over phosphate emissions. i.e. there was a large growth in the number of cows in the Netherlands following the abolition of EU milk quotas – and this led to a rise in phosphate emissions. In turn this led the Dutch

government to introduce a phosphate emission cap for farmers. If you have innovations that can reduce emissions and increase production, there is a big opportunity."

For Robeco, the research continues. But it is clear that their consideration of critical sustainability issues in the agri-business supply chain leaves them well-positioned to reap sustainable profits.





Asset owner perspective

INTERNATIONAL FINANCE CORPORATION: GOOD ANIMAL WELFARE IS GOOD BUSINESS

The International Finance Corporation (IFC), a member of the World Bank Group, is the largest global development institution focused exclusively on the private sector in developing countries. It provides loans and financing to support growing private businesses throughout the developing world and its mission is to create opportunity where it's needed most, delivering lasting solutions for development. IFC currently has more US\$91bn of assets under management.



SUSTAINABILITY IS CRITICAL TO POSITIVE DEVELOPMENT OUTCOMES

The IFC believes that environmental and social sustainability is essential for achieving positive development outcomes and managing risks.

All IFC projects and investments are assessed against its Sustainability Policy and Environmental and Social Performance Standards, widely regarded as a global benchmark for environmental and social risk management in the private sector. The IFC Performance Standards provide a framework for measuring and improving environmental and social performance, and all investments are required to have Environmental and Social Action Plans, which are agreed during due diligence as a condition of financing and encourage performance improvement over time.

IFC invests only in companies that demonstrate commitment to compliance with its Environmental and Social Performance Standards. Clients who are engaged in primary agricultural production, including animal husbandry, are advised to manage those operations in a sustainable manner through the application of industry-specific good practice.

AN EMERGING AND IMPORTANT ISSUE

IFC sees animal welfare as an emerging and important issue, for businesses around the globe and the

organisation has produced a Good Practice Note – Improving Animal Welfare in Livestock Operations² to guide how issues of animal welfare are managed. The good practice note sets out the business case for strong animal welfare and the welfare standards businesses should work to achieve.

GOOD WELFARE IS GOOD FOR BUSINESS

IFC argues that animal welfare presents both risks and opportunities for companies, and that good animal welfare is good for business. Reduced exposure to stress and disease for animals increases productivity. Consumers also want to know that animals are treated humanely. Demonstrating best practices in animal welfare can improve market access – an issue which is often crucial for the growth of emerging market businesses.

Head Industry Specialist for the IFC's agribusiness sector, John Hatton explains: 'Over the last decade or so animal welfare has become increasingly important for livestock operations. Regulatory oversight is expanding across the food supply chain, and consumer tastes are changing to demand both better welfare and food safety standards.

ifc.org/wps/wcm/connect/67013c8046c48b889c6cbd9916182e35/
 IFC+Good+Practice+Note+Animal+Welfare+2014.pdf?MOD=AJPERES



Those emerging market producers who meet and exceed standards can gain access to new markets for animalwelfare-accredited products.'

IMPROVED PRODUCTIVITY

The IFC's good practice note highlights growing evidence to show that improvements to animal welfare can also lead to improved productivity, with potentially positive impacts on the bottom-line.

For example, research indicates that improved stock handling practices can save the industry millions every year by improving the quality of processed meat. Other research has shown that improving the attitudes and behaviours of people handling dairy cows can lead to a four to five percent increase in milk production on dairy farms. Aggressive or poor handling of pigs for just a few minutes a week can reduce growth by 11 percent and reduce pregnancy rates by as much as 62 percent.

ANIMAL HEALTH

The IFC good practice note highlights how poor animal health can negatively impact businesses and cites research from the World Organisation for Animal Health (OIE) which estimates that animal diseases cause the loss of at least 20% of global livestock production each year with a cost of approximately US\$300bn. The risks

Aggressive or poor handling of pigs for just a few minutes a week, can reduce growth by 11%.

of disease and biosecurity extend beyond the industry to wider society, said Hatton. 'Emerging diseases such as avian-flu and swine flu can threaten entire facilities and lead to the destruction of huge numbers of animals, and present significant risks to humans.'

MORE INFORMATION: ifc.org

8 | CASE STUDIES | 9



Ethical investor perspective

AUSTRALIAN ETHICAL INVESTMENT: INTENSIVE ANIMAL FARMING AS A NO-GO INDUSTRY

Australian Ethical Investment Limited is a leading ethical investment specialist, managing a range of managed investment and superannuation funds. Every investment Australian Ethical makes is subject to vigorous ethical and investment tests. It currently has AUD\$1.5bn (approx. US\$1.1bn) of assets under management and counts more than 30,000 Australians as customers.



ETHICS AND FINANCIAL PERFORMANCE

For Australian Ethical, animal factory farming sits alongside sectors such as tobacco and armaments as a no-go industry from which any investment is excluded by its Ethical Charter³.

The firm's Ethical Charter is widely regarded as being one the most stringent ethical investment tests in the industry, setting out the ethical considerations which underscore Australian Ethical's investment decisions. It uses positive and negative screens to ensure Australian Ethical invests in companies that support people, animals, the environment and sustainability and avoids investments that cause harm to people, animals or the planet.

Australian Ethical estimates that only 30% of the top 200 companies on the Australian Stock Exchange are acceptable for investment under their charter. Once the Ethical Charter is passed, a company's financial performance is assessed. Head of Ethics Research at Australian Ethical, Dr. Stuart Palmer explains, "We don't trade off our ethics for financial performance, but we also have a responsibility to ensure that we invest only in companies where we positively assess their capacity

to generate long-term value for members and investors.

Our approach aligns the ethical and financial dimensions."

Animal factory farming is one of the industries which the firm screens out because the cruelty endured by the animals is assessed as unnecessary and unacceptable by Australian Ethical.

FISHING UP BETTER COMPANIES

Despite screening out intensive animal farming,
Australian Ethical does not automatically exclude
investment in companies which raise animals for
food. However they find that the many animal welfare
and environmental issues associated with the sector
significantly limit ethical investment opportunities.
The challenge in finding companies that meet
Australian Ethical's strict animal welfare requirements
means they don't currently invest in any land-based
animal meat production or dairy companies.

Australian Ethical's search for ethical animal agriculture companies has led them to invest in Tassal⁴ – which is Australia's largest salmon producer. The company has strong sustainability credentials, including development

of a 'zero harm fish welfare program'. Australian Ethical believes this is good for the company and society both in the long and short term.

Dr. Palmer explains, "The world's fisheries are 50% over exploited. Aquaculture has the potential to reduce over-fishing by substituting feedstock from wild fish with plant based protein. When compared with other types of meat, fish produce less emissions, avoid the impacts of land-clearing and require less feedstock. We also think aquaculture can reduce fish suffering through the use of stunning when fish are killed.

Tassal is a leader in the aquaculture sector having worked with WWF-Australia to achieve the highest global standard of responsibly produced seafood, and are the first salmon farm to achieve full certification by the Aquaculture Stewardship Council⁵ for all their sites."

MOVING AWAY FROM LIVE TRANSPORT

As-well as avoiding investments in those companies that do not meet its Ethical Charter, Australian Ethical also puts resources into engaging with investees if that company does something that is not aligned with its ethical values. For example Australian Ethical has engaged on the issue of the live transport of animals – which involves transporting farm animals sometimes huge distances and across borders for fattening and/or slaughter. The process is regarded as being extremely stressful for the animals involved – and often includes excess time in extreme heat. In 2015, there were a number of high-profile cases of abuse of Australian animals transported to Vietnam, resulting in public outcry.

The risks that surround the overuse of antibiotics in animal agriculture, particularly for animal welfare and human health, are simply too big to ignore. Antibiotics should be used to treat sick animals, not to sustain growth promotion and factory farming.

ed with other types of meat, fish produce less emissions, avoid the impacts of land-clearing and require less feedstock. (Image: Tassa

Australian Ethical won't invest in companies involved in live export of animals. They engaged with a large, local bank they are invested in which they discovered was a member of a live export trade association. Australian Ethical argued that support for the industry is inconsistent with responsible lending practices, and the bank did not continue its membership.

NOT WHAT THEY PRESCRIBE

While Australian Ethical are not shareholders in any of the companies involved, Australian Ethical Investment also recently joined the FAIRR collaborative engagement on antibiotics⁶. Ethics Analyst at Australian Ethical, Ella McKinley explains, "We felt the risks that surround the overuse of antibiotics in animal agriculture, particularly

4. tassal.com.au

5. en.wikipedia.org/wiki/Aquaculture_Stewardship_Council

 fairr.org/news-item/1-trillion-investor-coalition-demands-corporateaction-on-systemic-overuse-of-antibiotics-press-release

3. australianethical.com.au/ethical-approach

10 | CASE STUDIES | 11



Asset manager perspective

CORNERSTONE CAPITAL GROUP: INQUIRIES, INJECTIONS AND INVESTMENT OPPORTUNITIES

Cornerstone Capital Group (CCG) is an integrated financial services firm offering investment advisory, corporate advisory and investment banking capabilities. CCG systematically integrates Environmental, Social and Governance (ESG) factors into all of its analyses and services, as the firm believes these specific corporate performance metrics drive long-term financial returns.



for animal welfare and human health, are simply too big to ignore. Antibiotics should be used to treat sick animals, not to sustain growth promotion and factory farming. We may not be invested in any of the companies involved, but we wanted to lend our voice to this important initiative."

USING BBFAW AS PART OF ESG INTEGRATION

Finally, Dr. Palmer adds that both the annual Business Benchmark on Farm Animal Welfare (BBFAW) benchmark report and the investor briefings produced by BBFAW are a crucial tool to help them understand how animal welfare issues link to sustainability.

He explains, "We used BBFAW's investor briefing on Animal Welfare in farmed fish? as part of our ongoing research on Tassal, as it showed us both where they are leading the way and which areas we can work with them to improve." More broadly, Australian Ethical also uses the annual Business Benchmark methodology and criteria to help them and investee companies understand the animal welfare risks in potential investee companies. "We use BBFAW in the same way we use the United Nations Guiding Principles Reporting Framework to help check a company's human rights performance. It is a great tool we can also give companies to show them how they can understand and report on their animal welfare issues." says Dr. Palmer.

We use BBFAW in the same way we use the United Nations Guiding Principles Reporting Framework to help check a company's human rights performance. It is a great tool we can give companies to show them how they can understand and report on their animal welfare issues.

Michael Shavel, Cornerstone's Global Thematic
Analyst, explained to FAIRR that clients and prospects
are increasingly asking about sustainability issues
related to intensive farming. He said, "It is an important
issue that is moving from the niche to the mainstream.
Some clients are concerned that there are serious health
issues potentially connected to the factory farming
model and they want to know how they can align their
portfolios with their concerns, or make sure they don't
own companies that are ignoring these issues".

ASSESSING MANAGERS

On behalf of its investment management clients, CCG performs due diligence on managers, evaluating both their financial performance and the degree to which they incorporate ESG factors into investment strategies. For clients with a focus on animal welfare and factory farming, the firm leverages its research to include questions related to these topics into the manager due diligence process. Shavel explains, "Where relevant, we ask portfolio managers questions on areas such as the food safety supply chain to get a sense of whether they take these issues seriously. It becomes clear pretty quickly whether they have considered intensive farming issues without any depth". For example, if the manager owns a poultry producer, Cornerstone will ask how that manager thinks about the development of the antibiotic-

free chicken market and what impact it might have on margins and future market share.

ANTIBIOTICS AND ANIMAL HEALTH

One of Cornerstone's flagship reports and work streams has been their thesis on antibiotics and animal health⁸. In brief this argues:

- That antibiotic resistance is a growing concern and that the misuse and overuse of the drugs in animal agriculture is one of the drivers;
- That a confluence of regulatory action (see table) and heightened consumer awareness is exerting pressure on livestock producers to reassess their usage of antibiotics; and
- That there is both investment risk for those companies ignoring this trend and investment opportunity – for example in a number of other specialty and nutritional feed additives that are utilized for similar purposes.

Shavel elaborates on this theory pointing to growing consumer demand for meat and poultry raised without

 bbfaw.com/media/1432/investor-briefing-no-23-animal-welfare-infarmed-fish.pdf



 cornerstonecapinc.com/2015/10/flagship-report-antibiotics-andanimal-health-value-chain-implications-in-the-us

12 | CASE STUDIES | 13

e majority of all antibiotics produced are given to livestock – nearly half of all antibiotics in the UK, two-thirds in the EU, and 80% in the U.S

The year up to 25 Jan 2015 saw sales of antibiotic-free chicken increase 25% in dollar terms to 11% of overall chicken sales in the US.

the routine use of antibiotics. Market research firm IRI, he notes, found that in the year up to 25 Jan 2015 sales of antibiotic-free chicken increased 25% in dollar terms to 11% of overall chicken sales in the US.

This changing consumer demand, and changing regulation presents significant near-term and long-term risk to earnings for some animal-health companies. And Shavel points to US poultry producers Sanderson Farms as an example of a company that has so far resisted the industry's moves to curb antibiotic use.

TURNING RISK INTO OPPORTUNITY

Cornerstone's research argues that as nutritional feed additives are generally produced by major chemical companies and sit as only a small portion of overall revenues, investors should look to companies with more concentrated exposure to prebiotic and probiotic feed additives for a chance of good returns.

Shavel points to companies like Danish biotech firm Novozymes, who recently partnered with Adissseo to develop a new pro-biotic product for poultry that could act as an alternative to using antibiotics as a growth promoter. "It's important to watch these companies,"

says Shavel, "because if the data around some of their products is compelling it could be scaled up and really move the needle for a business of their size."

Cornerstone has also highlighted other areas of potential opportunity such as vaccines and biosecurity i.e. alternative processes, systems or products that can help replace antibiotics and reduce the chances of an infectious disease being carried on farms.

BEYOND ANTIBIOTICS

Shavel acknowledges that the overuse of antibiotics is not the only ESG issue associated with factory farming, but says that Cornerstone has yet to do indepth research on other factors such as environmental damage. "On a personal level," he adds, "it's clear to me that advances like antibiotics have enabled factory farming to be one of the primary methods for feeding the world but that some rethinking of intensive farming is going to need to come into play".

It's clear to me that advances like antibiotics have enabled factory farming to be one of the primary methods for feeding the world but that some rethinking of intensive farming is going to need to come into play.



SWEDEN

1986 Banned all AGPs Banned all general prophylactic medications



DENMARK

1995 Banned avoparcin Changed rules for veterinarians' practices

1998 Full voluntary ban of AGPs by the pork and poultry industry

2000 Compulsory ban of AGPs



EU-WIDE

1997 Banned avoparcin Banned all 2006 remaining AGPs



THE NETHERLANDS

2010 Established registration process for veterinary prescription of antibiotics

2010 Set reduction targets for total antibiotic use in livestock: -20% in 2011 and -50% in 2013

2012 Reset target to -70% in 2015



US

2005 Banned fluoroquinolones in poultry

2010 Published first annual

summary report of antimicrobials sold for use in food-producing animals

2012 Banned unapproved use of cephalosporins

2013 Released final FDA

Guidance of Industry #213

2015 Final rule of Veterinary Feed Directive

2016 Expected complete implementation of GFI #213

GFI – Guidance for industry

AGPs – Antibiotic growth promoters

otable regulation on the use of antibiotics in animal feed, Oct 2015 (Source: Cornerstone Capital Group)

ANTIBIOTICS AND ANIMAL WELFARE

Shavel also points to the complex, ongoing discussion on the relationship between antibiotics and animal welfare. He says, "We've observed consumers campaigning for 'no antibiotics for animals ever.' But when engaging with companies on this we also hear the argument that antibiotics are necessary to treat certain types of disease (even on less intensive/non-factory farms), and refusing to treat sick animals wouldn't be consistent with animal

welfare obligations. Thus there is an important nuance, says Shavel, between slogans such as 'no antibiotics ever' and investors' calls for an end to the routine use of antibiotics important to human health in their global meat and poultry supply chains.





Asset manager perspective

ACTIAM: ENGAGING TO CHANGE MEAT PRODUCTION

ACTIAM is a responsible fund and asset manager based in the Netherlands, with €52 billion in assets under management. They were one of the first FAIRR network members and have been a signatory to the PRI since it was formed in 2006.



INTEGRATING INTENSIVE FARMING **CONCERNS INTO THE ACTIAM INVESTMENT PROCESS**

ACTIAM's investment process is underpinned by a set of Fundamental Investment Principles based on international treaties, conventions and best practices - such as the Principles of the UN Global Compact that are applied across all investments. Issues such as animal welfare, where there is no global consensus, are not specified in these principles but are still considered as part of the investment research process.

Kristel Verhoef, an Active Ownership Specialist at ACTIAM explains, "We purchase ESG research from providers such

We construct an ESG score for each company that invest in or plan to invest in. Animal welfare issues will form part of that score.

as Sustainalytics to screen our entire investment universe against UN Global Compact requirements every quarter. Any major controversies related to animal welfare are flagged as part of this screening. Furthermore, as part of our ESG integration process, we construct an ESG score for each company that we invest in or plan to invest in. Animal welfare issues will form part of that score where relevant". The ESG score is fed into the investment process to enable an investment decision to be made.

ACTIAM also uses the Business Benchmark for Animal Welfare (BBFAW) as a tool to assess how well food companies are performing in this area. Verhoef explains, "BBFAW shows us what standards companies should be aspiring to. Because of its focus on farm animal welfare it also provides us additional insights for engaging companies, that more standard ESG research does not give us.'

ACTIAM also signed the recent investor statement on animal welfare 10 coordinated by BBFAW.

VISION FOR CHANGE

The firm is currently transitioning to a more thematic approach with a focus on climate, water and land.

10. actiam.nl/nl/duurzaamheid/Documents/

"Issues of animal welfare and intensive farming are linked to all three of our key themes", says Verhoef.

She adds that ACTIAM's approach to the livestock sector is to discuss the change they would like to see and what progress can be made. ACTIAM concedes that intensive farming will remain a reality in the near-term, but finds it important that all commodities, including meat, are produced in a responsible way.

They would like to see the following developments:

- A sector that rejects animal cruelty;
- A sector that aligns its emissions in order to meet the two degrees pathway set by the Paris Climate Agreement;
- A sector that helps provide access to affordable and healthy food.

ACTIVE OWNERSHIP IS CRUCIAL

ACTIAM sees voting and engagement as an important way to put their principles into practice and Verhoef says that animal welfare-related issues have begun to feature more frequently in their voting and engagement activities.

Verhoef gives the example of a recent shareholder proposal at US meat giant Tyson Foods that ACTIAM supported. The resolution asked the board of directors to disclose potential financial risks and 'impacts' of using gestation crates in pork production. ACTIAM argues that confining pigs in gestation crates is out of step with consumer sentiment, animal welfare requirements and regulatory trends.

Although the resolution was defeated at the AGM, Verhoef believes it sent an important signal to the company about the potential concerns of shareholders. In May 2016, ACTIAM voted at the McDonalds AGM, urging them to adopt a policy to reduce the use of nontherapeutic antibiotics in their global meat and poultry supply chains, and joined the FAIRR collaborative engagement¹¹ on the same topic.

Explaining their support for the engagement Verhoef says, "We strongly agree with the arguments behind this initiative. The overuse and misuse of antibiotics in the meat industry is contributing to the rise of antibiotic-resistance. A health crisis needs to be prevented. We don't claim to have all the answers but it's important that investors fire a warning shot to put these issues on companies' radars and be assured that they are managing them effectively."

She adds, "I see a lot of similarities between the intensive farming sector and palm oil sector, where, several years ago deforestation and human rights violations seemed to be an unavoidable part of the industry. And while there are still many problems remaining, we have seen improvement, driven in large part by a handful of leading companies who are taking the issues seriously, and thus changing the industry in positive and innovative ways. I hope we soon see the same in intensive farming".

11. fairr.org/news-item/1-trillion-investor-coalition-demands-corporateaction-on-systemic-overuse-of-antibiotics-press-release



9. actiam.nl/nl/duurzaamheid/Documents/ Fundamental_Investment_Principles.pdf Investor_statement_on_farm_animal_welfare.pdf

Asset manager perspective

IMPAX ASSET MANAGEMENT: ANIMAL WELFARE IS A KEY CONSIDERATION FOR A SUSTAINABLE FOOD AND AGRICULTURE INVESTMENT STRATEGY

Impax Asset Management is a UK based, specialist boutique asset manager, with approximately US\$5.4 billion* of assets under management – primarily for institutional clients through both listed and private equity strategies.



INVESTING IN SUSTAINABLE FOOD AND AGRICULTURE

Impax runs six listed equity strategies and Environmental Social and Governance (ESG) analysis is embedded in the investment process when considering all potential investee companies. Failure to reach a sufficiently high ESG score will limit or prevent investment.

The company's Food and Agriculture Strategy seeks to achieve long term capital growth, and provide a level of income, by investing in companies that are addressing the challenges of sustainable food supply, resource efficiency and nutritious content. Impax looks to invest in the most innovative leaders in global food and agriculture markets that are providing solutions to natural resource constraints in the food supply chain – benefiting from exposure to the provision of nutrition within the context of rising consumer demand for better quality, traceable, healthy, natural and safe food – providing solutions to adverse health effects of a poor diet.

Analysis of consumer purchasing decisions indicates a growing demand for high quality and high welfare meat and dairy products with traceability for reassurance on the integrity of the supply chain. The Impax investment

strategy seeks to invest in the leaders of food production and distribution which stand to benefit in terms of top line growth related to this trend.

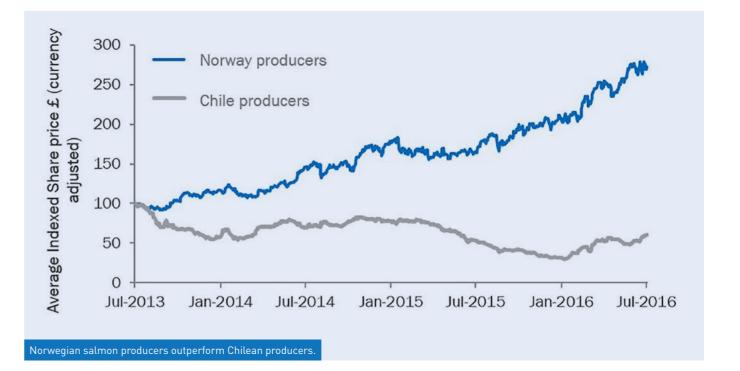
As well as food producers and retailers, Impax has exposure to companies involved in the testing of foods which, following the 'horsemeat scandal' in the UK, have seen an expansion in demand for their services.

Impax looks for companies which stand out for their innovation and integrity in delivering a sustainable food system. These typically exhibit the following characteristics:

- Robust policies on animal welfare
- Accreditation of animal welfare, such as the Global GAP Animal Welfare add-on or equivalent farm assurance programme
- No routine use of antibiotics

SUSTAINABLE SALMON FARMING

Impax has identified consumer demand for low fat protein and pollution from intensive farming models – including regulatory trends to control it, as key drivers of value in its food and agriculture strategy. Sustainable salmon farming is a good example of an industry with long-term growth potential because it helps to satisfy consumer demand while sustainable production minimises the regulatory risk.



In particular, Impax has identified the Norwegian salmon industry as a high-quality market leader for sustainable salmon.

NET BENEFITS FOR NORWAY FROM REDUCED ANTIBIOTIC USE

Despite having the strictest salmon husbandry regulations in the world, including tightly limiting the use of antibiotics in fish, Norway is the world's biggest salmon producer. The limits on antibiotic use mean that Norwegian fish farms tend to use lower intensity models and have introduced 'cleanerfish' to ensure the health and welfare of the fish. Cleanerfish are small fish like wrasse, cichlids, catfish or pipefish that feed on or clean the dead cells and parasites from the skin of larger fish such as salmon. This is a natural form of parasite and disease control that significantly reduces the need for antibiotic use.

In contrast, the fish farming sector in Chile, which is the world's second largest salmon producer, has little regulation. The weak regulatory environment has led to rapid expansion of fish farming but also meant that many fish farms are too close together and use very intensive farming methods, causing widespread bacteria and disease, toxic algal blooms and water pollution.

The proliferation of the Piscirickettsiosis bacteria has become widespread in Chilean waters causing legions, haemorrhaging and eventually death in infected fish. Toxic algal blooms are estimated to have cost Chilean salmon farms more than \$800m in lost production in 2016.

Because the fish are intensively farmed, and farms are close together the bacteria has spread quickly and left Chilean farmers relying on antibiotics to keep fish healthy. However this widespread use of antibiotics has led some of the major US retailers to start sourcing salmon from Norway instead. Toxic algal blooms are estimated to have cost Chilean salmon farms more than \$800m in lost production¹² in 2016 alone.

By investing in Norwegian salmon production with high sustainability standards Impax has been able to benefit from the margin opportunity of reliable, high quality salmon.

 theguardian.com/environment/2016/mar/10/chiles-salmon-farmslose-800m-as-algal-bloom-kills-millions-of-fish



^{*} As at 30 June 2016

Asset manager perspective

KAMES CAPITAL: INTENSIVE FARMING CAN FEATURE ACROSS THE BOARD – FROM EXCLUSIONS TO ENGAGEMENT

Kames Capital is a UK based asset manager and a wholly owned subsidiary of the Aegon NV Group – who manage around \$380billion of assets worldwide¹³. They pursue a wide range of investment strategies for clients including pension funds, government agencies, financial institutions, wealth managers, family offices and financial advisers. These include both specific 'ethical' funds and mainstream funds that take ESG issues into consideration.



FACTORY FARMS INCOMPATIBLE WITH AN ETHICAL APPROACH

Kames' three ethical funds collectively manage approximately £2.6bn in assets. All three ethical funds screen out those companies that do not meet the companies pre-defined ethical criteria. These criteria include issues of animal welfare and mean that Kames' ethical funds do not invest in companies that:

- Provide animal testing services;
- Operate intensive farms;
- Operate abattoirs or slaughterhouses;
- Produce or sell meat, poultry, fish or dairy products.

Head of Corporate Governance and Ethical Research Ryan Smith explains, "Our animal welfare screen is very strict and our ethical funds are some of the few available for clients who wish to have no direct or indirect exposure to companies with poor animal welfare practices."

13. End of Q1 2015, aegon.com/Documents/aegon-com/Media/Fact-sheets/Fact-sheet-Aegon-Asset-Management.pdf

EMERGING ISSUES FROM IN INTENSIVE FARMING

Beyond their 'ethical' range Kames also launched a new 'Global Sustainable Equities Fund' in April 2016 which will be a 'high-conviction' fund that explicitly integrates issues of sustainability into its investment process. This fund will not use an exclusion screen when it comes to animal welfare issues but, explains Smith, "is likely to use intensive farming as one of the sustainability issues for relevant sectors that help us focus down to a limited portfolio of 35–45 stocks which perform in terms of both in-depth sustainability and financial fundamentals."

The fund will be looking for both 'leaders' and 'improvers' and so offers an incentive for food & beverage-related companies that may currently rely on intensive farming but are putting in place measures to improve their sustainability over the long-term.

A FACTOR ACROSS ALL FUNDS

Beyond their new fund and specialist ethical offerings, animal welfare-related issues can also shape investment decisions in Kames' mainstream funds and form part of their corporate engagements on ESG issues. For example, when considering investments in food production companies, Kames has identified food safety



as a potential risk. Smith explains, "Probably one of the most immediate material ESG risks for investments in meat, dairy and indeed all food is food safety and supply chain management. The recent horsemeat scandal in the UK shone a light on risks linked to poor oversight of supply chains. If good safety standards are not in place food can become contaminated and pose a risk to consumers. Tainted or contaminated food can lead to costly recalls and consumer backlash, with financial consequences."

After the 2013 horsemeat scandal, Kames held meetings with Tesco about issues of food safety to ensure they put safe and transparent supply chains in place.

Intensive farming related issues can also be passed from Kames across the whole Aegon Group. "If our sustainability team unearths an important sustainability risk," says Smith, "then we share that information across the wider Group to that other fund managers can act on it if relevant".

THERE ARE ALSO OPPORTUNITIES

Smith says there are also some opportunities arising in the food production sector. He explains, "There is a broader societal trend towards healthier eating – increasingly consumers are demanding foods that

are lower in salt, fat and sugar and whose origin they know. This means there are opportunities for companies specialising in product reformulation or that produce healthier alternatives. For example our Global Sustainable Equity fund has invested in Hain Celestial – a US based natural foods producer who we believe are well placed to benefit from this trend.

One of Hain Celestial's brands is FreeBird Chicken – which produces high welfare, antibiotic free and organic chicken. FreeBird assesses all its farmers welfare practices against the Global Animal Partnership's 5-Step Animal Welfare Rating Standards program – a leading international animal welfare standards rating program, which has recently been adopted by Whole Foods Market. All FreeBird farmers must be certified to at least level two.



Private equity perspective

COLLER CAPITAL: AN ISSUE COMING TO THE FORE IN PRIVATE EQUITY

Coller Capital is a leading international private equity firm with over US\$17 billion of assets under management. Issues related to intensive farming are among the many ESG issues that the firm monitors and on which it seeks to exert influence in managing its global portfolio.

Coller Capital

Coller is a major player in private equity's secondary market, in which investors buy and sell interests in private-equity funds and asset portfolios. This means that the firm is usually one step away from the 'coalface' when it comes to influencing corporate ESG behaviour. Coller Capital (whose CIO is FAIRR founder Jeremy Coller) nonetheless has impressive policies and processes to ensure intensive farming ESG issues are taken into consideration by the private equity managers (General Partners, or GPs) with which the firm invests.

ALL ALONG THE VALUE CHAIN

Adam Black, Head of ESG & Sustainability at Coller Capital explains, "The vast majority of our work is done through our portfolio GPs, since they deal directly with underlying investee companies. Our aim is to ensure that GPs are considering farm animal welfare and other ESG factors wherever these are applicable to an investment. The majority of Coller's GPs either now have an ESG policy covering animal welfare issues or are in the process of developing one. In some cases we ask GPs to sign side-letters confirming their intention to consider farm animal welfare issues, as part of an investment".

The firm is also starting to share knowledge and contacts on ESG and sector-specific ESG issues, including factory farming, with its global network of GPs – ensuring that relevant managers know about tools such as the Business Benchmark for Farm Animal Welfare (BBFAW), for example.

"Where we can influence quarterly reporting by our GPs, we ask them to report any material ESG incidents, including farm animal welfare-related ones," adds Black.

INCLUDING IT IN DUE DILIGENCE

In addition to the firm's investments in private equity funds, Coller Capital invests directly into portfolios of privately-owned companies. The firm works more closely and proactively with the GPs of these companies, and in these cases has more influence in managing intensive farming risks and opportunities.

"For example, farm animal welfare issues are included in the due diligence checklist of ESG, financial, and other risks that our transaction teams complete before any entity is considered for investment," says Black.

"As far as possible, we seek a bottom-up approach.

My role is to build on what the transaction team
discovers by asking more technical questions and
completing my own searches on applicable companies.

We seek to establish where there might be gaps – and
we expect the GP to work on these post-investment,
if the transaction proceeds."

Black also cites an example of an investment that was rejected by the firm, in large part because it included agribusinesses that were seen to be under-managing ESG impacts connected with intensive farming.



A GROWING ISSUE WITH REAL IMPACT

"Factory farming is not an issue that has always received adequate attention even from the most responsible investors", argues Black. "But its potential for negative impacts – in terms of human health, environmental emissions, labour standards, and consumer resentment of poor animal welfare – is becoming a major concern to investors". He continues, "The factory farming industry also has worrying health and safety issues, with workers consistently exposed to high-hazard farming machinery, musculoskeletal hazards and occupational health exposures – and all in the context of an industry that has high injury and fatality rates".

Coller Capital sees real opportunities in well-run agribusinesses; indeed, some companies in its 'direct' portfolio have achieved notable ESG success. These include food and grain suppliers, both in the UK and across Africa, that have won awards for their sustainability initiatives (supply chain engagement with farmers) or achieved high standards of environmental and social certification (ISO 14001, SA 8000, OHSAS 18001).

LOOKING AHEAD

Black explains that Coller Capital is on a journey, and that there are several areas in which the firm believes further improvements will be possible in the management of intensive farming issues (and ESG more broadly) across its portfolio.

"I'd like to encourage more GPs to go beyond desk-based monitoring of these issues. I'd like them to 'kick the tyres' of their agribusiness companies out in the field, in order to get a real understanding of what the issues and opportunities might be. Testing their standards against the BBFAW criteria, for example, could be a really good model" says Black, who also supports more collaborative shareholder engagement in this area.

"More generally", he continues, "I think FAIRR members should work on distilling four or five 'golden rules' that they can apply to the factory farming universe. This approach is very common in high-hazard industries such as oil & gas or extractives, and I think investors could usefully apply learnings from these sectors to factory farms".

MORE INFORMATION: collercapital.com

Venture capital perspective

NEW CROP CAPITAL: RIPENING \$6BN ALTERNATIVE PROTEIN MARKET READY FOR PICKING

Launched late in 2015, New Crop Capital (NewCropCapital.com) is a \$25 million venture capital fund that invests in sustainable start-ups developing "clean" (i.e. cultured) and plant-based meat, dairy and egg products, as well as in tech platforms that are promoting a more plant-based diet. An investment strategy, the firm says, that is about both saving the planet and making money.



Bruce Friedrich, Chief Executive Officer at New Crop explains: "In 2014, the global meat substitutes market was worth about \$3.4bn and is forecast to grow by 7.5% a year over the next five years – making it worth nearly \$6bn by 2022. And these are conservative estimates, so it is an exciting sector."

CHANGING CLIMATE IS CREATING TASTY NEW OPPORTUNITIES

New Crop Capital also believes global mega-trends such as government responses to climate change and a growing global population will accelerate the growth of alternative proteins. "If we are going to feed 9.7 billion people by 2050 and stay within the two degree limit set by the Paris Agreement, we have no choice but to shift away from animals for protein. The livestock sector contributes about 40 percent more than transport to climate change, and it's a vastly inefficient way for us to meet our protein needs. This presents a big opportunity for companies that can devise a tasty and affordable plant-based or cultured substitute for meat, and for those who invest in them."

Changing consumer preferences are driving the growth of the alternative protein market, argues Friedrich. He explains, "Consumers are increasingly aware of the impacts of agriculture – be it on carbon emissions, resource use or human health. If we can make alternatives that are cheaper, delicious and more convenient, then we will see big growth. If the alternate meat

market could mirror the success of the alternative milks – milks such as soy and almond milks now account for more than 8% of the milk market – then the industry could be worth more than \$16bn in the next 10 years, and that is just in the United States."

EXCITING OPPORTUNITIES

Though relatively young, New Crop Capital has a strong deal pipeline and has already invested in nine companies, including:

- Memphis Meats a "clean" (i.e., cultured) meat startup, which has already raised more than \$3 million in seed funding.
- Lighter a software platform and meal delivery service aiming to make plant-based eating easier.
- The Purple Carrot a consumer-facing provider of plant based meal kits.
- Lyrical Foods a manufacturer of brands such as
 Kite Hill, which makes a range of popular nut milk
 products, and which recently secured an \$18 million
 investment from food conglomerate General Mills.
- Beyond Meat a plant-based meat company that is putting its burgers in the meat aisle, which also counts investors such as Bill Gates and some of Silicon Valley's biggest venture capital firms.
- Miyoko's Kitchen an artisan plant-based cheese company.



In 2014, the global meat substitutes market was worth about \$3.4bn and is forecast to grow by 7.5% a year over the next five years – making it worth nearly \$6bn by 2022.

And these are conservative estimates, so it is an exciting sector.

SCALING UP HAS STARTED

Although New Crop is making investments in the \$100,000 to \$500,000 range, which is small compared to some investors, they believe that there are already signs of the alternative protein market being ready to scale up. Friedrich says, "The UK alternative meat company Quorn, was sold for more than \$800m in late 2015. And the company has experienced significant growth – demand in the US increased 30% last year alone."

BIG NAMES ARE TAKING NOTICE

It isn't just New Crop Capital that is excited about the opportunities in the future of food. Big name investors such as Bill Gates and Google co-founder Sergey Brin are also investing in alternative meat companies. And more tellingly, some meat companies and the industry itself is taking notice too. For example Meatingplace Magazine – a magazine for the meat industry ran a cover story about the plant based meat substitute

market in their March 2016 issue¹⁴. The feature indicated that plant-based proteins and vegetables are the top trends for 2016¹⁵, and that in the January issue of the same magazine, the editor suggested that the meat industry itself should put R&D and M&A resources into plant-based and clean meat companies like Beyond Meat.

Alternative proteins now also have their own nonprofit, as a new organization, The Good Food Institute¹⁶, has hired a policy director, a team of scientists, an entrepreneur in residence, and other professionals to promote plant-based and clean meat alternatives to conventional meat, dairy, and eggs, and a new trade group, the Plant Based Foods Association¹⁷, has also been established.

The transformation of the food system is well underway and New Crop and their nonprofit allies are determined to benefit (and benefit from) the next generation of food industry disruptors.

- 14. library.meatingplace.com/publication/?i=293261
- onegreenplanet.org/environment/consumer-trends-driving-the-riseof-sustainable-plant-based-foods-in-america/
- 16. gfi.org
- 17. plantbasedfoods.org



Research provider perspective

ETHICAL SCREENING: ENABLING CLIENTS TO OPT OUT OF INTENSIVE FARMING

Ethical Screening is a UK based ethical investment research firm that provides information and guidance to help institutional investors, such as Old Mutual and Alliance Trust as well as charities and private clients invest responsibly or in accordance with their values. It uses ethical screens to analyse investment portfolios and funds according to a broad range of social, human rights, environmental concerns including issues related to animal welfare and the production of animals for food.



Ethical Screening's research is not intended as financial advice for clients, however Senior Researcher at Ethical Screening Elina Vikmane, says there are a number of material risks linked to factory farming and farm animal welfare, explaining:

"Farm animal welfare in modern farms is intertwined with a range of short-term and long-term social and environmental risks that may impact the financial performance of the sector. In the short-term companies particularly retailers may be exposed to reputational risk and loss of customer trust and a drop in share price if issues arise in the supply chain. In the long term animal agriculture is linked to a number of negative environmental impacts including significant greenhouse gas emissions, impacts on water scarcity and deforestation. A lack of fresh water for example, can restrict the operations of a cattle farm and in water scarce regions the cattle farms might need to compete for water with local communities, thus risking their social license to operate in the area."

IDENTIFYING THE ISSUES

Ethical Screening's research is client driven and tailored to the particular concerns and values of each client. The clients who are more concerned about animal welfare issues include animal charities and

ethical fund managers who wish to exclude involvement in intensive farming from their funds. Clients complete a standard questionnaire covering 70 ethical criteria to help identify the ethical issues they do not want investment exposure to. Four of these are linked to the meat, egg and dairy industry. These criteria cover the full spectrum of the meat and dairy industry – from factory farms to animal transport and technology to food retailers.

The four criteria are:

Breeding and rearing

That is companies involved in the breeding and rearing of livestock (including egg and dairy production), such as farms and companies selling animal breeding stock.

Abattoirs or transport

That is companies which operate abattoirs or companies involved in the transport of animals to slaughter. This includes animal processing units with abattoirs and supermarkets that operate their own abattoirs.

Industry services

That is companies that provide equipment, machinery or technology essential to the intensive production of animals for food, as well as companies transporting



animals. This includes companies making and supplying milking machines, stunning equipment and growth promoting drugs.

Processing and retail

This covers companies involved in processing animals for food or selling animal products as food. This is then broken into three sub-categories, Major, Medium or Minor based on the percentage of revenue generated by these activities.

- Major Companies where these activities are principle source of revenue, such as supermarkets, food producers and restaurant chains.
- Medium Companies where food sales account for a significant proportion of revenue but it is not the principle activity. For example, Hotel and Pub chains.
- Minor Companies where food sales account for a small proportion of revenue – such as general retailers.

All Ethical Screening's research is provided in neutral way indicating whether a company is involved in a particular area. These assessments can then be integrated into materiality analyses to help inform better investment decisions.

Farm animal welfare in modern farms is intertwined with a range of short-term and long-term social and environmental risks that may impact the financial performance of the sector.

MORE INFORMATION: ethicalscreening.co.uk

SASB PUT INTENSIVE FARMING ISSUES ON THE MAINSTREAM ENGAGEMENT AGENDA

The Sustainability Accounting Standards Board (SASB) is an independent organisation that develops industry-specific standards for use in disclosing material sustainability factors to investors. It develops and maintains sustainability accounting standards for 79 industries including the Meat, Poultry and Dairy industry.



SASB recently released The SASB
Engagement Guide for Asset Owners
and Asset Managers. The Guide
provides industry-by-industry guidance
and questions to help investors enhance
ESG engagement with companies.



Below are some of the key questions SASB suggests investors ask animal agriculture companies to ensure robust assessment of long-term risks and opportunities associated with the Meat, Poultry and Dairy industry.

ANIMAL CARE & WELFARE

- How does the company incorporate and ensure animal welfare in its own production and the production of its supply chain?
- Is the company planning to expand its cage-free egg and gestation-crate-free sales?

CLIMATE CHANGE

- What is the company's exposure to climate change regulations efforts and how is it working to mitigate climate change impacts?
- How does the company incorporate climate change considerations into managing livestock supply?
- How does the company incorporate climate change considerations into the management of feed sourcing?

WATER USE

- What are the major constraints on the company's ability to maintain adequate access to clean water resources?
- To what extent are the company's operations exposed to water stress?
- What is the company's ingredient supply chain exposure to water stressed regions?

ANTIBIOTIC USE

What are the company's policies and practices regarding the use of medically important and nontherapeutic antibiotics?

FOOD SAFETY

What systems does the company have in place to prevent or mitigate recalls?



using.sasb.org/engagement-guide-for-asset-owners

ABOUT THE FAIRR INITIATIVE

The FAIRR Initiative is a collaborative investor network. It aims to raise awareness of the material impacts that factory farming can have on investment portfolios, and works to help investors share knowledge and form collaborative engagements on issues related to intensive farming.

fairr.org

