

NATURAL CAPITAL LEADERS PLATFORM

Creating a net-positive dairy industry: The UK Dairy Action Research Collaboratory

Background

In an increasingly resource-constrained world, business needs to account for their natural capital dependencies and impacts in the same way it does for financial capital. As they become ever more aware of their reliance on natural resources which are not only increasingly degraded and scarce from global population pressures, but are also subject to tighter restrictions and regulations, businesses face a new generation of risks and opportunities.



The Cambridge Natural Capital Leaders Platform convenes companies and financial institutions wishing to better understand and manage their impacts and dependencies on the products and services that nature provides to business in their operations and supply chains. By valuing these impacts and dependencies, our members are able to make better decisions, identify new opportunities and create more resilient supply chains through the enhancement of natural capital. The Platform is managed by the Cambridge Institute for Sustainability Leadership (CISL). Over the last three years, we have been instrumental in helping progressive companies develop practical tools for businesses to understand the natural capital risks within both their supply chains and operations and offer a leadership voice to others.

The dairy industry has the potential to play a critical role in the stewardship and enhancement of natural capital in diverse rural landscapes around the world. Companies along the dairy value chain are themselves - in different ways - dependent on these goods and services provided by nature. Increasing pressures on nature can be seen through land use change, increasing agricultural demands for water, reduced soil and water quality, biodiversity loss and climate change impacts. For companies and investors, issues like the availability and costs of inputs, levels of productivity, customer pressures, operational disruptions, regulation compliance and reputational risk are all related to how we manage agricultural growth whilst enhancing natural capital in the future.

These pressures present companies and their investors with both threats and opportunities. With better understanding, innovative approaches and new business models, companies along the dairy value chain have the potential to both individually and collectively manage these risks. At the same time there is the opportunity to make a significant contribution to improving the quality of life for a wide range of stakeholders who would benefit from a healthy and more productive natural environment particularly at the landscape level.

What is missing?

Several industry-wide initiatives such as the *Dairy 2020 Vision* have developed principles that if followed would protect and enhance the environment¹ and some of these are incorporated in the industry's recent, *Leading the Way Sustainable Growth Plan*.

It proposes several key environmental goals:

- Encourage the sustainable management of soils
- Minimise the industry's environmental footprint
- Invest in the use of renewable energy sources
- Optimise water use efficiency
- Protect and improve habitat and biodiversity
- Increase the amenity value for rural community and wider society
- Address dairy's wider natural capital impacts/dependencies in international supply chains (e.g. fertilizer, feeds)

CISL has an established reputation for convening companies and the investment community around visions of sustainability. By offering access to the best science and thought leadership within a neutral space companies along value chains are able to co-create solutions and translate their goals into action. Our recent and unique UK-based business collaboratories highlighted the shortfall in UK agricultural land use targets and created innovative models for future water asset investments as a means of responding to increased drought incidences. These collaboratories looked to generating agenda-setting outputs for better integration of business and government strategies for natural capital management.

The Dairy Action Research Collaboratory (ARC) responds to the needs of companies along the UK dairy value chain that will enable them to move beyond principles and toward coordinated action in order to capture tangible benefits for these companies, the rural economy and wider society. In particular the ARC will create:

1. A shared understanding of the implications of these industry visions for companies and financial institutions along the dairy value chain in terms of managing impacts and dependencies on natural capital
2. Consensus on the optimum mix of current and next-generation interventions at the farm and landscape levels that enhance natural capital as underpinned by the best science
3. A practical plan of action and methodology to measure progress toward a net positive industry.

How the ARC will help companies along the dairy value chain

By focusing on three major natural capital components - the health of soil, water and biodiversity - CISL will work with a select group of companies and financial institutions along the dairy value chain to help them understand, measure and manage soil, water and biodiversity interconnectivities; this will subsequently reduce risks while also creating benefits at the production level of the dairy value chain. The ARC will examine existing impacts/dependencies, identify gaps and propose new approaches to measuring and managing the natural capital components.

The work of the ARC is designed to complement and add value to the other initiatives in which the company may be involved in the UK (and Europe). It will identify significant impacts (both positive and negative) that current initiatives may have on the long term productivity of natural capital, develop realistic scenarios and propose individual/collective business interventions, focussing on impacts and dependencies, that will reduce the business's exposure to risk by enhancing both natural capital and societal value in the UK.



¹ Principle 7 - Stewarding companies: Working to protect and enhance ecosystems, improving elements such as biodiversity, water, soil fertility and nutrient availability.

ARC companies and other partnerships

Members of the Platform have expressed interest in working with CISL to shape the Dairy ARC and have asked CISL to invite other companies and financial institutions to join the ARC process. CISL's role is to provide a collaborative space and offer the latest research to address the specific natural capital challenges at landscape level that the companies wish to focus on. The duration of the ARC will initially be one year, with a maximum of four meetings during that period to review the ARC's progress, though the exact length will be determined by the companies involved. Milestones and deliverable outputs will be agreed at the beginning of the process.

CISL invites companies and financial institutions that demonstrate a willingness to look beyond short-term measures and take a more holistic view of their long-term dependencies on natural capital. These companies will be at different points in the value chain and offer different perspectives, but will share an enthusiasm for developing innovative solutions that manage these long-term risks. The ARC will build important links with other relevant initiatives and organisations.

In consultation with ARC companies CISL will harness the latest research resources, draw on expertise from within the different University of Cambridge departments and our wider academic and leadership networks and from the companies themselves. Where appropriate CISL will utilise the data and findings from the member company's own field research projects.

ARC deliverables

(1) Communication tool on the next generation of business risk/opportunities

Problem: Natural capital impacts and dependencies are not yet easily understood.

Solution: An impact and dependency infographic and business challenge paper that highlights the next generation of business risks and opportunities associated with soil, water and biodiversity.

A simple, business ready media will help articulate dependencies and risks related to natural capital and impacts upon financial and social capital. The material will identify, in a single place, what the natural capital dependencies risks are for business. It will build understanding and consensus in a company around the materiality of natural capital and articulate natural capital dependencies as a business priority. It will also help articulate to investors and other stakeholders where a business is making progress to reduce risks.

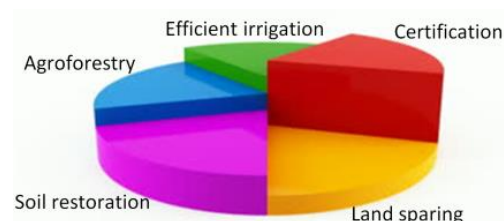


(2) 'Landscape Blueprint' that secures supply chains and business value

Problem: Farm and landscape approaches are often not integrated and some are not designed to address natural capital risks; how can business determine the appropriate investments to secure supply chains?

Solution: Map of the best mix, for business, of new and complementary approaches to address supply chain dependencies upon natural capital and evidence the optimal business investments that will return long-term value at farm and landscape scale.

An important first stage is the assessment and comprehensive mapping of current complementary initiatives which on their own do not fully address natural capital impacts and dependencies. This will be built on by identifying the balance of new and existing approaches that can generate value for business; this includes the returns and rewards from securing financial, social and natural capital in the long-term. Such analysis can also be used to maximise return on future investments and reduce long-term risks.



The ARCs are a vital component of the Platform's ground breaking land management analytic tool kit

The Natural Capital Leaders Platform is designing a framework for companies and financial institutions wanting to demonstrate -to shareholders, customers and investors - management of their natural asset portfolios (both owned by the company and 'leased' from society). By using the Natural Capital 3D framework companies can establish their depth of business perception and validate their action plans. It contains new metrics, next generation land management approaches, valuation techniques and horizon scanning to anticipate future trends, that collectively will enhance a company's natural assets.

Natural Capital 3D is underpinned by Cambridge rigour and science, providing the missing piece in current supply chain sustainability approaches by

incorporating soil, water and biodiversity measurement and management. An important component of the framework is the next generation of sustainability case studies to validate these new approaches - the ARCs.



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