

Independent Strategic Review of the Northern Ireland Agri-Food Sector

SUMMARY



Sir. Peter Kendall

SUMMARY

In many respects, Northern Ireland's agri-food sector has a seriously impressive story to tell. From a modest land base of around a million hectares, 70% of which is classified as less favoured area, it produces enough food for more than five times its own population. 77% of its produce is consumed beyond its borders. It is the largest manufacturing sector in Northern Ireland and ranks second when it comes to exports outside the UK. In other words, it is a significant part of the economy.

In addition, the agri-food sector is critical to rural areas and balanced regional development, with some 86% of agri-food processors based outside the Belfast City Council area and almost 26,000 farm businesses operating in rural settings.

But the environment has paid the price for that impressive success, particularly the growth of the livestock sector over the last 40 years, making the most of a climate that favours grass production. Its very success poses the biggest threat to its future.

Not only that. In purely economic terms, agri-food is widely viewed as low-margin, low-wage and low value-added by policy makers.

“Northern Ireland’s agri-food sector has a seriously impressive story to tell.”

THE CHALLENGES

There is no escaping the challenges:

- Brexit has drastically reduced the availability of EU workers in Northern Ireland, and Covid-19 has exacerbated the problem. Access to labour is a strategic challenge faced by the whole of the UK, but the proximity of Northern Ireland to the Republic of Ireland, where there is open access for EU workers and a General Employment Permit scheme for third country nationals, makes the risk more acute for NI agri-food.
- Primary production is heavily fragmented, particularly in beef and sheep and, to a lesser extent, dairy. There is a huge structural challenge in beef and sheep in particular. At the same time, other sectors – the soft fruit sector, for example – are undercapitalised and not reaching their growth potential.
- Productivity among NI food processors is also a major issue with GVA per employee lagging behind that of their counterparts in GB. There is clear empirical evidence that the food processing sector needs to embrace process technology not just to press on and lead, but to catch up and be fit for purpose.
- The ruminant livestock sector has a multiplicity of bodies covering overlapping briefs, creating duplication and inefficiency.

- Conacre is a barrier to progress on multiple fronts.
- In terms of its environmental credentials, Northern Ireland agri-food does not have a positive story to tell right now. This is particularly true when it comes to the impact of (a) agriculture's surplus nutrients on water quality, and (b) of ammonia on sensitive sites and biodiversity generally. A scaling back of the livestock sector is a real possibility if this is not turned round.
- Total greenhouse gas (GHG) emissions from agriculture have risen by almost 9% since 2009, the majority coming from enteric fermentation in cattle. Agriculture accounts for 26% of Northern Ireland's GHG emissions. Again, the sector is under threat unless the direction of the dial is changed.
- There is a real threat to the meat sector from alternative proteins. If the sector does not show that it is serious about its carbon footprint, the environment and animal welfare, consumers will vote with their feet and take up what they perceive (rightly or wrongly) to be a more environmentally and welfare-friendly offer.
- The major British retailers are ahead of the game in imposing carbon and other sustainability targets; like it or not, sustainability will become agri-food's licence to trade.
- Free trade agreements between the UK and third countries post Brexit pose a significant potential threat to NI agri-food trade to GB.
- There are not enough NI food brands when compared with the level of food production here. Northern Ireland does not have a culture which supports entrepreneurship and innovation.
- There is a disconnect in government engagement with the agri-food chain. Connectivity generally and the risk of duplication (and gaps) across funding and research bodies has been a recurring topic in discussions.

In short, Brexit and GB-NI trading arrangements, coupled with the climate emergency, have created an unprecedented challenge. Add to the mix the data revolution and we have a sector at a fork in the road. One option is to take the safe route, repeating its traditional rallying cry at every step (we feed you, protect us from competition); the other takes it on a demanding but ultimately rewarding collective journey towards sustainability and increased competitiveness.

THE OPPORTUNITIES

The sector is not expected to make that demanding journey alone. The NI Executive is on the same trajectory, and is there to support business.

- DfE's "10x Economy" strategic vision sets out to transform the whole NI economy over the next decade through innovation and green growth. A 10x economy looks for more than financial outcomes; environmental and societal outcomes matter too. We see NI agri-food only benefitting by being front and centre of the vision and not left on the side lines, particularly as it has so much to contribute to the environmental and societal bottom line.
- City and Growth Deals are a once-in-a-generation game-changer, bringing in investment of approximately £1 billion to build innovation capacity and capability. These funds can be and are being harnessed by the wider agri-food sector and will be transformative in terms of digitisation.
- The NI Executive's Green Growth Strategy Framework, led by DAERA and working to a longer time frame, is set to underpin all government policies. There is an urgency and an opportunity here. As the Climate Change Committee Chairman Lord Deben has said: *"Northern Ireland must act swiftly to deliver a green recovery and avoid the substantially higher costs of delayed climate action. If successful, Northern Ireland has the capability to become a climate leader, deriving action from Westminster by setting the benchmark in Belfast."*

In this new post-Brexit green growth era there is no room for special pleading for the sector, but there is a case to be made for Government intervention where intervention will help deliver on the Executive's ambition.

There are other positives too:

- Following the UK's exit from the EU, Northern Ireland has unique access to two large trading blocs (GB and EU).
- There is a growing sense of place, of NI as a food destination, and a fierce pride in what the sector has to offer. A positive narrative around geography, provenance, taste, animal welfare and sustainability is likely to become more important, while also being a passport to export opportunities.
- Northern Ireland already has a good story to tell on the generation of renewable energy from wind, solar and AD. The pressing need to decarbonise the economy presents massive opportunities for the agri-food sector, particularly when it comes to re-purposing surplus nutrients from livestock as part of the development of the circular economy.

STRATEGIC ADVANCES

Based on what we have learned during our review, we envisage and support the following strategic advances, aimed at addressing the challenges and making the most of the opportunities mentioned above:

- the creation of a Northern Ireland Diamond model for agri-food, with a centre of science and research excellence at its core and which ensures that:
 - the sector's needs are taken on board, not just by the central departments of the Executive but by the local councils benefiting from City and Growth Deals;
 - agri-food businesses benefit from the technological innovations and data revolution envisaged by DfE's 10x Economy vision and those City and Growth Deals; and
 - the sector itself is joined up in its asks, based on a rigorous assessment of what it needs and what is doable.
- an all-embracing industry-led Sustainability Body raising, measuring and certifying environmental and carbon credentials of everything from apples and oats to venison and yoghurt;
- the wholesale mapping of Northern Ireland's soils to give a baseline for the demanding journey towards net zero;
- a joined-up 'circular economy' which takes NI's nutrient surplus and repurposes it to decarbonise energy supply, replace imported fertiliser, peat compost and more;
- a new agricultural policy which drives data management, productivity improvements, innovation, soil health and long term environmental recovery;
- a food-processing sector supported to invest in innovation; and
- a big bold drive to make the sector more competitive and attractive by upskilling its workforce and developing its leaders.

OUR RECOMMENDATIONS

To make those strategic advances a reality, we have made a series of forward-looking recommendations, grouped into the eleven themes we have set out below. Our recommendations are not a long list of unconnected actions; they are a package, all of which are needed to take the agri-food sector on the journey we have described.

All eleven themes have action points for Government. But success is not all down to Government, far from it. The sector – farm businesses, feed companies, food manufacturers, artisan producers, tech suppliers, entrepreneurs, knowledge institutions, representative bodies – need to own the challenge and work with Government to make the changes that are needed.



1. EMBRACE THE SMART USE OF DATA AND THE OPPORTUNITIES IT CREATES.

We are looking for nothing short of a data revolution in agri-food. Measuring and reporting the right kind of data, then joining it up to make sure it gives the agri-food sector a competitive advantage is front and centre of our review recommendations. Data and digitisation are the single biggest enablers for the journey agri-food needs to take, whether that is the journey towards net zero, to greater productivity or the path towards “best-certified food in the world” status.

Before the agri-food sector can tell a compelling story, it needs to have a story to tell. That story will be based on traceability, safety and sustainability, all of which rely on verifiable and verified data across the whole chain.

Policy steps need to be investigated to raise the bar and ensure the maximum potential level of data coverage, collection and analysis. We see the Northern Ireland Diamond – recommendation 2 below – as being central to this data revolution.

“Before the agri-food sector can tell a compelling story, it needs a story to tell.”

RECOMMENDATION	ACTION
<p>a. Farms must collect data and manage their performance against the findings.</p>	<p>DAERA must require farms to collect (and report) data as a condition of financial support.</p> <p>Farming organisations must strongly encourage their members to digitise.</p>
<p>b. Digitisation of data systems should be a feature of any investment in facilities by food processing companies.</p>	<p>DfE must create incentives and provide support for companies to collect, store and analyse data and to use it for management.</p>

RECOMMENDATION

c. All businesses across the food chain must invest in data management systems. This should happen now. Government must facilitate this investment by providing know-how and financial support.

d. DfE and DAERA must work together with the industry to ensure that all agri-food data sources are joined up, accessible, analysed and interpreted to facilitate agri-food connectivity and the development of appropriate policies.

ACTION

DfE and DAERA must work together to ensure there is end-to-end digitisation of the whole agri-food supply chain.

DAERA and DfE must actively facilitate data sharing wherever possible. They must set targets and timelines and must provide the personnel, software and hardware resource required to enable effective cross-industry data sharing.



2. CREATE A NORTHERN IRELAND DIAMOND TO DELIVER GREEN GROWTH.

We think there is an exciting opportunity to bring all parts of Northern Ireland agri-food together to deliver on the massive challenges. “Green Growth” sums up the ambition.

We have been inspired by the “Northern Ireland Diamond” proposal developed by QUB and AFBI, modelled on the successful ‘Dutch diamond’ approached used in the Netherlands.

Essentially the NI Diamond model seeks to create an ecosystem in which the four ‘partners’ of government, business, society and the knowledge base, work together to pool goals, resources, risks, responsibilities and competencies in agri-food. The NI Diamond will be fundamental to the delivery of the Executive’s Green Growth Strategy.

It is about a completely different way of working, based on a new integrated and collaborative approach. Risks and benefits will be shared by all four parts of the Diamond. They will agree programmes of work, who leads on those and who contributes what in terms of funding, expertise and support. We see the NI Diamond as ensuring that industry, government, society and the knowledge base are using each other’s datasets, resources, skills and funding to move in the same direction. It will be critical in guiding the data revolution we referred to above, in identifying who is responsible for doing what, and when.

Central to the success of the Dutch Diamond is “Wageningen University and Research” which sits at its core. In the Northern Ireland diamond an alliance of institutes (QUB, AFBI, Ulster University, CAFRE, and Agri-Food Quest) has the potential to be a collaborative science, research and education powerhouse.

“The NI Diamond will be fundamental to the delivery of the Executive’s Green Growth Strategy.”

RECOMMENDATION	ACTION
<p>a. We recommend that a multi-stakeholder 'Northern Ireland' Diamond is developed along the lines of the 'Dutch Diamond' model, and at pace. Its focus will be to deliver the Green Growth Strategy in the agri-food sector. Fully costed proposals for the pilot stage should be presented as soon as possible and by Spring 2022 at the latest.</p>	<p>The support of the NI Executive will be critical. We would like to see DAERA and DfE Ministers (and other Departmental ministers) provide public leadership and support, outlining the vision and rallying stakeholders to get involved in the co-design of the project.</p> <p>DAERA's Food Strategy Framework (currently out for consultation) will need to be re-framed to align with the NI Diamond model.</p> <p>The NI Diamond should not limit its activities to central government departments; it should include and involve all local authorities. This is an opportunity to ensure regional balance in agri-food.</p>
<p>b. QUB, AFBI, Ulster University and CAFRE should move towards a more collaborative model, under an inclusive advisory board, to create a 'Wageningen for Northern Ireland' at the heart of the NI Diamond.</p>	<p>This falls to QUB, AFBI, UU and CAFRE, but it must be supported by DAERA, DfE and the whole Executive.</p>
<p>c. The four knowledge institutions should be adequately resourced for this task; there will need to be funding allocated for them to produce a collective plan for how they will drive forward the Green Growth Strategy as part of the wider NI Diamond.</p>	<p>DAERA and DfE should work together, with DoF, to ensure that sufficient resource is in place to drive the implementation of the NI Diamond.</p>

RECOMMENDATION	ACTION
<p>d. Further work on the creation of multi-disciplinary thinking cells should be undertaken, with a view to an additional innovation tool being available to NI Diamond partners.</p>	<p>A task for the NI Diamond.</p>



3. DEMONSTRATE THE SECTOR'S SUSTAINABILITY THROUGH A NEW SUSTAINABILITY BODY.

We are supporting an industry-led proposal for a 'Sustainability Body' for Northern Ireland agri-food. It will be an alliance of existing organisations and functions, and will reach across the whole chain to enable agri-food to market its products with a fully developed, certified and unified sustainability message behind them.

We endorse the proposal; it is a vital bridge between where the sector is now and where it wants to be. The proposed Sustainability Body is not primarily a marketing body. It will:

- measure and monitor sustainability metrics and design marketing messages based on those metrics;
- encourage and drive adoption on farm;
- contribute to the long-term structural improvement in the quality of Northern Ireland's soil; and
- report back needs (e.g. relating to research and skills) to the NI Diamond.

Again, the Sustainability Body, working closely with the NI Diamond, will be critical to the data revolution in agri-food. We recognise the need for clear areas of demarcation, to avoid duplication; that will be one of the tasks that the various bodies involved in developing the Diamond will need to cover.

RECOMMENDATION

- a. We strongly support the industry-led move to develop a “Sustainability Body” for NI agri-food. A fully fleshed out and costed proposal must be ready for presentation to relevant ministers as soon as possible and by Spring 2022 at the latest.

We urge those heading up the design of the Sustainability Body to engage widely with all parts of the agri-food sector, and we would urge all parts of the sector to engage with its development.

The planned repurposing of bodies supporting the beef and lamb sector as part of the development of the wider Sustainability Body is also supported.

- b. We urge those heading up the design of the Sustainability Body to engage widely with all parts of the agri-food sector, and we would urge all parts of the sector to engage with its development.

- c. The planned repurposing of bodies supporting the beef and lamb sector as part of the development of the wider Sustainability Body is also supported.

ACTION

This should initially be driven by a small group of organisations, to include representatives from beef, lamb, dairy, pork, and cereals sectors. They will meet to apportion responsibilities and to agree a development group, the resource needed, and timelines.



4. BE AMBITIOUS ON NET ZERO.

Climate change, and getting to net zero by 2050, is a global challenge. But it is a challenge that will impact the agri-food sector in Northern Ireland more than we can possibly imagine over the next 10 - 20 years. It will change what and how farmers farm, how land is used, how factories are designed and powered, how and where goods are transported, how waste is treated and re-cycled through the chain, how people earn their living, what people eat, what scientists research, what students learn, what is valued and how public money is spent.

Northern Ireland is behind other regions in setting long term targets and carbon budgets per sector. Whichever climate change bill makes it onto the statute book, food producers and the rest of the supply chain will be on the hook in terms of their GHG emissions.

RECOMMENDATION

- a. We would encourage joint working between farmers and environmental groups, with assistance from the NI Diamond knowledge base (AFBI in particular), to agree 'journey towards net zero' principles.

- b. Food and feed companies should seriously consider engaging with NIEA within DAERA to develop Green Growth Agreements and DAERA must allocate sufficient resource to them.

- c. Food processing companies should embrace annual sustainability reports even where they are not a legal requirement.

ACTION

Farming representatives and environmental groups will need to come together, and draw on AFBI and CAFRE expertise in their work.

DAERA/NIEA should engage with feed and food companies to accelerate the creation of Green Growth Agreements, starting immediately but eventually delivering in conjunction with the Sustainability Body.

There is a role for DfE here in providing guidance, support and signposting.

RECOMMENDATION

d. DAERA should commission collaborative research through the NI Diamond into how farm-based carbon budgets and trading could work.

e. To support the case for investment decisions, further focused research should be undertaken on:

- (i) the potential for biomethane production and its role in decarbonising heat; and
- (ii) the potential size and shape of the bioeconomy in Northern Ireland, reviewing the availability of feedstocks from farming and food and the interplay between different biomass applications.

ACTION

DAERA in conjunction with the NI Diamond.

DfE should lead on this, working with the NI Diamond (and DAERA in relation to agricultural feedstock potential).



5. AIM HIGH ON YOUR ENVIRONMENTAL SCORECARD.

As we said above, achieving net zero is a global challenge. Northern Ireland cannot solve it on its own. In contrast, the big environment challenges – air and water quality, biodiversity, landscape – are in Northern Ireland’s hands. Only Northern Ireland can tackle them.

As with the journey towards net zero, this will need strong leadership and oversight from government. It will need habitat mapping and baselines establishing, it will need large-scale, long term land management projects which pull together a whole range of stakeholders (landowners, graziers, environmental groups, ecologists, engineers, community groups), it will need targets set and plans in place (and regulation) to get to target, it will need research, new technology and innovative approaches to delivery and public/private funding. That, in turn, will need skills which Northern Ireland may not have enough of yet. There is a supply side issue (and opportunity) here.

The sector’s future depends on getting on with the job. Its ambition to sell Northern Ireland produce on the back of its sustainability, as encapsulated by the plans for a new Sustainability Body, depends on plans being put in place, and quickly, to turn the sector’s environmental scorecard round.

RECOMMENDATION	ACTION
<p>a. DAERA should lead on a co-designed, cross-departmental land use strategy for Northern Ireland that complements and informs its Future Agricultural Policy Framework, future environmental schemes and the NI Peatland, Energy, Green Growth and Circular Economy strategies.</p>	<p>DAERA, in conjunction with DfE and other Departments, working through the NI Diamond with sector representatives and environmental groups.</p>
<p>b. Challenge Funds should be used to encourage new ideas and innovative approaches to delivering long-term environmental improvement at scale across multiple landholdings and land tenure arrangements.</p>	<p>DAERA, farmers and environmental groups.</p>

RECOMMENDATION	ACTION
<p>c. Research should be commissioned through the Northern Ireland Diamond to explore the extent of the skills gap in landscape-scale environmental delivery of the kind that is envisaged under the draft Peatland Strategy, and to make recommendations about how any skills gap should be addressed.</p>	<p>DAERA, NI Diamond, environmental groups.</p>
<p>d. Lessons learned from the take-up and management of EFS Group schemes should be pulled together to support a “what works” analysis as part of future scheme design.</p>	<p>DAERA, environmental groups and farmers.</p>
<p>e. We recommend that the limit on maximum agreement value under the EFS – Wider scheme is removed and that future public goods delivery schemes are not subject to a maximum agreement value.</p>	<p>DAERA</p>
<p>f. In relation to agricultural land, the NI Executive should make a fully developed case based on productivity gains to the UK Government for income tax reliefs, along the lines of the model in the Republic of Ireland, to be introduced to incentivise longer lets.</p>	<p>NI Executive.</p>



6. BOOST INVESTMENT BY LARGE FOOD BUSINESSES.

We would argue that large food manufacturers should be able to access capital grants to support their investments in innovation in the same way as smaller businesses.

The argument for capital grants for the processors is compelling, particularly now, for three main reasons.

First, there is a real risk that processing facilities will shift from Northern Ireland to the Republic of Ireland or other parts of the UK where investment grants are available. That is not sour grapes; the NI processing sector is at a competitive disadvantage versus processors in those areas and, as market operators, companies will generally follow the money unless there are compelling reasons not to.

This is a critical consideration. The migration of agri-food manufacturers away from Northern Ireland will hollow out local communities and damage the regional balance in the economy that large agri-food manufacturers help provide. Achieving regional balance is central to the Executive's own economic vision.

Second, the Green Growth Strategy makes huge demands on agri-food as a key sector of the economy. Where what is being demanded from food manufacturers goes beyond their own strict financial interests and is in the public interest (the greater good of the environment or Northern Ireland society) it seems to us that a targeted public investment is justified.

Third, there is a real risk that agri-food will end up limited, not by lack of product development but by the number of workers it can recruit. This is a strategic challenge for the sector. Automation of food processing will be a large part of the answer, reducing reliance on a scarce supply of local workers.

Invest NI already has an *Agri-Food Investment Scheme* (AFIS) for large businesses in draft form. It has received State Aid approval from the EU and that approval lasts up to 31 December 2022.

RECOMMENDATION

- a. DfE should move swiftly to open a window for applications under its Agri-Food Investment Scheme (AFIS).
- b. Invest NI should endeavour to seek an extension to the current end date for the AFIS; we accept that there will be a 'window of opportunity' for processors to apply for investments but if the deadline is 31 December 2022, there will be insufficient time for applications to be developed.
- c. The indicative limit of 20% match funding should be flexible, with companies allowed to bid for more depending on the value-added green growth their projects will deliver.
- d. The scheme should not be constrained by a cost-per-job analysis. This makes no sense in the current climate.

ACTION

DfE should move quickly to initiate the capital grant funding process and ensure that it is used to drive productivity and sustainability.

Invest NI.



7. FOCUS ON TRADING ARRANGEMENTS, BEYOND GB.

Northern Ireland's post-Brexit status and GB-NI trading arrangements are highly contentious. They are also a moving feast, with potentially significant changes on the cards resulting from current EU – UK exchanges. These matters are out of the hands of the NI agri-food sector and it would be a mistake for us to allow them to distract from our report's key recommendations.

What we do want to stress is that agri-food businesses need certainty and stability. They need to know what legislative regimes they must operate under and what trading rules apply so that they can organise their systems and plan for the future.

It is clear, however, that the agri-food sector must look beyond GB, and even the EU, for future trade. The prospect of cheaper livestock products entering GB under new third-country trade deals makes this absolutely critical. This is a particular threat for the red meat sector, which currently exports just over 2% of its product outside GB/EU markets.

RECOMMENDATION

- a. Northern Ireland businesses need certainty and stability. We recommend that the NI Executive and sector representatives continue to work with the UK Government and the EU Commission to find workable regulatory solutions that will ease GB – Northern Ireland trade and animal movements.

ACTION

DfE and DAERA must support the NI Assembly and the UK Government in ensuring that trading arrangements are stabilised, allowing NI agri-food businesses to adjust and plan.

RECOMMENDATION

ACTION

- b. Agri-food businesses and Invest NI should work together in a structured way to identify the strategic global markets of the future for the sector's products, particularly as Northern Ireland's 'sustainability' story develops.

DfE should work with Invest NI, the UK's Department for International Trade and NI agri-food business representatives to structure Northern Ireland's approach to beyond-GB marketing and provide the resource to facilitate this.

- c. There should be an immediate assessment of Invest NI's capacity to lead on strategic market development for NI agri-food and how it will work with the Northern Ireland Diamond and the Sustainability Body. This assessment should include a review of its market intelligence and consumer insights capability.

DfE and Invest NI working with the NI Diamond and the Sustainability Body.

- d. The 'disconnect' between Northern Ireland departments and Defra in relation to export health certification and approvals in international markets should be investigated, and protocols put in place to ensure that NI exports are not disadvantaged.

DAERA



8. TACKLE SKILLS AND LABOUR SUPPLY.

It is difficult to overstate the extent of the labour supply crisis. With immigration a reserved matter, there is a limit to how far the solution to the loss of EU workers mentioned in our summary above is in Northern Ireland's own hands. We know that the NI Executive and sector representatives have made representations at the highest level in the UK and are continuing to make the case to the Migration Advisory Committee and the UK Government for changes to the Shortage Occupation List. We completely agree that Northern Ireland's unique situation (an open land border with the EU) should merit special treatment.

It is not just about labour supply though. More structurally it is about the skills needed for the agri-food sector to tackle the challenges of a new, data driven and streamlined way of doing business. Skilled butchers will always be needed, but the sector will also need operators who can input and understand data and manage automated processes. It will also need managers with a different range of skills, able to see the big picture and engage with the possibilities that technology offers. The future competitiveness of the sector depends on getting this right. And a sector that genuinely believes in skills and lifelong learning will also be more attractive as a career choice.

RECOMMENDATION	ACTION
<p>a. We know that the NI Executive and sector representatives have been making their case to the Migration Advisory Committee and the Home Office for changes to the Shortage Occupation List to include butchers and meat processing workers. We recommend that they continue to do so in the strongest terms.</p>	<p>DFE and sector representatives</p>
<p>b. The NI Executive must work with the UK Government as it seeks to encourage EU citizens with settled status to return to work in the UK and ensure that Northern Ireland is well represented in the UK Government's messaging.</p>	<p>NI Executive</p>

RECOMMENDATION

c. A big, bold shared vision and an action plan for skills development at all levels within agri-food should be developed by industry and knowledge institutions working through the Northern Ireland Diamond.

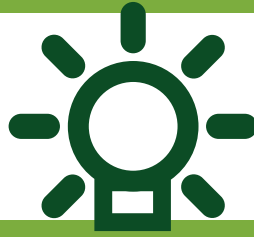
d. The agri-food sector must engage intensively with CAFRE, Ulster University and other training providers to create easy-access and engaging training courses to help develop the leaders and entrepreneurial mind-sets that are needed.

e. The sector must look to invest in automated processes and the streamlining of logistics to reduce its reliance on labour, whether local or from abroad.

ACTION

DfE should be the lead department on this, working through the NI Diamond. Agri-food businesses and their representative organisations must commit.

DfE should work with the agri-food sector to design and deliver a programme of funding and advice, in line with wider advanced manufacturing policies and drawing on support systems in the knowledge economy.



9. INNOVATE!

There is a massive need, and massive opportunity, for leaders and entrepreneurs to step in at this critical moment – post-Brexit, pre net zero – to drive Northern Ireland agri-food forward through innovation. There is almost no better moment for new product development and start-up activity. Developing a circular economy demands new solutions to age-old problems, and there will be opportunities and funding available to develop new technologies, ingredients and products to address changing consumer preferences.

The connection between higher rates of entrepreneurship and overall prosperity is well-established, but the general assessment is that Northern Ireland does not have a culture that supports and celebrates creativity, innovation and risk-taking.

RECOMMENDATION

- a. Research should be carried out to consider how Northern Ireland can exploit its strength in agri-food and food safety to seize opportunities in the development of alternative proteins and plant-based products.
- b. There are opportunities for entrepreneurs to set up new ventures – collaborative slurry management schemes, sensor technology, data platforms, nutraceuticals, sustainable packaging...the list is endless.

ACTION

DAERA, DfE and the NI Diamond should work with the agri-food and agri-tech sectors to identify opportunities for innovation. It will then fall to DfE/ Invest NI to support entrepreneurial initiatives.



10. DESIGN AN AGRICULTURAL POLICY THAT DRIVES CHANGE.

Free from the constraints of the Common Agricultural Policy, DAERA can now design a 'made for Northern Ireland' agricultural policy aimed at driving forward the Executive's Green Growth ambition while recognising that farming does so much more than just put food on tables.

We are encouraged by the direction of travel set out in DAERA's "Future Agricultural Policy Framework Portfolio" document but would urge an even greater focus on measuring and reporting information which is critical to the big challenges: net zero, anti-microbial resistance, productivity, soil health, biodiversity. At the same time, the future competitiveness of the sector depends on a huge skills gap being filled; all support should have a skills development element aimed at equipping producers for the demanding task ahead.

RECOMMENDATION	ACTION
<p>a. We recommend that DAERA, through and in consultation with other parts of the Northern Ireland Diamond, commissions research on behaviour change in agriculture and applies its findings in implementing Northern Ireland's future agricultural policy.</p>	<p>DAERA and NI Diamond</p>
<p>b. DAERA must require farms to collect (and report) data as a requirement for financial support. No 'resilience payments' or headage sustainability payments as envisaged in the draft future agricultural policy consultation should be made to farmers who refuse to have soil maps done on land under their control.</p>	<p>DAERA</p>

RECOMMENDATION	ACTION
<p>c. The future agricultural policy should be 100% aligned to the objectives of the NI Executive's Green Growth Strategy.</p>	DAERA
<p>d. DAERA should work with the horticulture sector to explore the co-design of a tailor-made investment scheme for soft fruit and other specialist sectors, and the horticultural strand of the future agricultural support framework.</p>	DAERA and horticultural representatives.



11. ENTICE TALENT AND ENTREPRENEURSHIP.

Finally, and linked to themes 8 and 9 above, we are calling on the agri-food sector to pull together to attract the next generation of leaders and entrepreneurs. The people who will break new ground and make sure the sector continues to be at the forefront of Northern Ireland's exciting journey. There are some inspiring examples from the distant and recent past; it is the future we are concerned with here.

RECOMMENDATION	ACTION
<p>a. The agri-food sector must work together to promote the attractiveness of the sector, as if its future depended on it. (It does.)</p>	<p>Sector representatives, CAFRE and the universities</p>
<p>b. DAERA and agri-food sector sponsors should continue to fund and support the Land Mobility Scheme.</p>	<p>DAERA and the agri-food sector</p>
<p>c. The agri-food sector – through its representative organisations – should investigate setting up an “Entrepreneurs of the Future” scholarship fund aimed at young people in the sector with a view to stimulating the development of entrepreneurial ideas and activity.</p>	<p>The agri-food sector</p>

CONCLUSION

In conclusion, at the heart of the review's message is the need to connect. Digitally along and across the agri-food supply chain. Between knowledge centres, tech entrepreneurs and businesses. And between primary production, environmental groups and Government.

It is natural to worry more about what we might lose (throughput, autonomy, members, the ideal outcome) than what we might gain (efficiency, synergy, social capital, a better outcome) but the sector needs to be brave and take some risks. So does the NI Executive in the support it offers and the interventions it makes where there is market failure or a need to accelerate change. With so much at stake, the risk of doing nothing is greater than the risk of acting.

As Minister Poots put it, speaking towards the end of our review: *"We need leadership, we need commitment, and we need innovation to take this one forward."*

Sir Peter Kendall

30 November 2021

Review team:

Dr Clive Black

Dr Jonathan Birnie

Julie Robinson

