

Health and Harmony – AHDB response to Defra consultation on the future of food, farming and the environment

MAY 2018

About AHDB

AHDB's purpose is to inspire farmers and growers to succeed in a rapidly changing world. Funded by the industry, for the industry, with a levy income of around £60 million annually, our organisation occupies a unique place at the heart of British agriculture, horticulture and the supply chain. Our activities span the whole of the UK and cover the beef and lamb, cereals and oilseeds, dairy, horticulture, pork and potatoes sectors (approximately 72% of UK agricultural output).

AHDB provides a variety of functions and services:

- Near market and applied research and innovation to tackle the everyday challenges that farmers, growers and the supply chain face
- Knowledge exchange with and between farmers, skills development and benchmarking
- Independent market analysis and intelligence to enable businesses to make informed decisions
- Building export markets for British meat, dairy products and crops
- Domestic market development to inspire our consumers

Our unique position as an arms-length body working for and on behalf of the industry puts us in a particularly important position to support the industry to make the most of the opportunities that a new agriculture policy in England will bring. AHDB is keen to partner with the industry and government to enable it to succeed. AHDB employs more than 400 skilled and committed staff who, along with the stakeholders with whom we work in close partnership, give us a strong perspective on the challenges and opportunities the industry faces.

Our current strategy, published in December 2016, identified four over-arching priorities where, working as one organisation, we are focussing our efforts.

These are:

1. Inspiring British farming and growing to be more competitive and resilient
2. Accelerating innovation and productivity growth through coordinated R&D and KE
3. Helping the industry understand and deliver what consumers will trust and buy
4. Delivering thought leadership and horizon scanning

In responding to this consultation our intention is to offer impartial analysis and identify where AHDB could support the industry and government in navigating a path towards a successful future. Our response tackles specific Sections and Consultations where we feel able to offer insight or potential solutions.

Summary

This is a once in a generation opportunity to devise an agriculture policy in the UK and specifically England that is fit for purpose. It should start from a shared ambition of a world class food and farming industry that is inspired by and competes with the best. Getting the policy – and importantly how it is delivered – right, is crucial.

Our response identifies four overriding priorities where, in partnership with Government, AHDB can play a significant role in achieving this shared vision. These are:

- 1. Enabling farmers and growers to be fit for the future and navigate a successful path through the transition to a new policy**
- 2. Delivering the essential co-ordination that our knowledge, innovation and skills system needs to accelerate the uptake of innovation, skills and best practice**
- 3. Helping to bring about a step change in the use of data through the livestock identification partnership and providing the necessary market analysis and data that businesses require to manage risks and make optimum decisions**
- 4. Building on the scalable model that is already in place between AHDB & Government in exports to develop new markets for our products at home and overseas**

SECTION 1 - AGRICULTURE – THE CASE FOR CHANGE

The new policy direction charted in Health and Harmony will, over time, mark a significant departure from the current CAP by removing direct payments and moving towards a new environmental land management scheme. Whilst our farmers and food supply chains have proven resilient to previous changes in the CAP the availability of financial support either via public intervention or direct payments has propped up farm incomes and secured food production across the EU. It has also undoubtedly entrenched dependency amongst many farmers and growers.

The reliance on direct payments for income varies across sectors and is demonstrated in the supporting evidence paper. AHDB's recent impact assessment work around Brexit has highlighted the fact that reliance on direct payments is not limited to any particular geographical location¹.

Our evidence indicates that the 25% of farmers in terms of farm business performance remain viable under the three scenarios we have assessed. Although the motivations for many farmers go beyond making a financial profit, it is highly likely that the policy direction outlined in 'Health and Harmony' will lead to significant restructuring of farming and growing as those businesses that are unviable without support cease production. Whilst this change process could be left to the market in our assessment it is vital that farmers and growers are equipped with evidence and tools to make conscious, proactive and strategic choices for their businesses and their families. For this reason AHDB has prioritised work on helping farmers, growers and food chain get fit for Brexit over the coming year.

In order to achieve the vision outlined in the consultation paper of a more self-reliant industry, the key is to improve competitiveness. Regrettably, our costs of production exceed our major competitors in many sectors and therefore a major concerted focus will need to be placed on supporting the industry to improve its underlying competitiveness and narrow the range in farm business performance².

The programme of work that we are developing under the banner of 'Fit for the Future' seeks to overcome the 'wait and see' attitude that AHDB & others have detected with regard to the approach being made by many farmers and growers about the future. In our view this is a high risk strategy and exposes those businesses that do not plan and prepare very exposed.

The Fit for the Future programme combines a number of critical elements including:

- The roll out of Farmbench, our new benchmarking tool (see further details in section 10)
- An extension of our monitor and strategic farms to over 60 that will provide more opportunities for farmers and growers to learn from other producers
- The development of an online toolkit that brings together existing knowledge exchange tools along with a new 'What If' tool that enables farmers to identify key business risks in relation to the hypothetical Brexit scenarios
- The delivery of our Dairy Optimal Systems programme that homes in on the key performance indicators that are critical to making a farm business financially resilient³. Similar KPIs are being developed for other sectors

We would welcome continued support from Government for our work to provide impartial evidence, analysis and insight to the industry and in developing practical tools for farmers and growers in particular.

¹ https://ahdb.org.uk/brexit/documents/Horizon_BrexitScenarios_Web_2017-10-16.pdf

² See https://ahdb.org.uk/documents/Horizon_Meat&Dairy_2018-01-31.pdf
https://ahdb.org.uk/documents/Horizon_Brexit_Analysis_june2017.PDF

³ <https://dairy.ahdb.org.uk/optimal-dairy-systems/#.WunEimxdPic>

SECTION 2 – REFORM WITHIN THE CAP

AHDB has no comment to make in this section.

SECTION 3 - AN 'AGRICULTURAL TRANSITION'

What is the best way of applying reductions to Direct Payments? Please select your preferred option from the following:

- a) Apply progressive reductions, with higher percentage reductions applied to amounts in higher payment bands **
- b) Apply a cap to the largest payments*
- c) Other (please specify)*

What are the factors that should drive the profile for reducing Direct Payments during the 'agricultural transition'?

AHDB offers no view on the most appropriate means of applying payment reductions. An economic impact assessment should be undertaken to assess the likely impacts of the different approaches. Given the impact assessment work we have undertaken thus far, AHDB would welcome the opportunity to work with government and industry on any assessment. It must also bear in mind that whilst the early indicators of future CAP reform indicate change and budgetary pressure, income support is likely to remain a cornerstone of the CAP for many years to come.

Our analysis does illustrate the potential impact of changes to support payments on farm business income (profit). A reduction in direct payments of 50% reduces average Farm Business Income (FBI) from £38,405 to £15,401, a reduction of almost 60% which would call into question the viability of many farm businesses. There is scope through restructuring and adaptations on farm to improve competitiveness and resilience, nonetheless this will not take place overnight. Therefore a transition period will be important in allowing structural change to take place and to help support farmers to make the best decisions, leading to the best outcomes.

Although we must be careful about the analogies that are drawn, there are some key lessons that can be taken from the experience of New Zealand⁴:

- As the structure of farm support changes there is likely to be a challenging transition period
- In order for the UK agriculture industry to be successful post-Brexit there will need to be a focus on efficiency and productivity. In New Zealand this was driven by a comprehensive and systematic focus on innovation such as revolutionising livestock genetics and production systems
- Agriculture operates most efficiently when decisions are based on actual market returns and production decisions are based on the market

As the industry transitions, it is important to avoid unintended consequences. For instance, if the overall vision is to build self-reliance, there is a need to avoid building up a new dependency on a new framework of support.

Funds made available from the reduction in direct payments could be made available to drive productivity, as well as to pilot environmental schemes. Farmers could be encouraged or incentivised to spend on infrastructure such as water storage and drainage, or be given vouchers to spend on training and skills development.

Improved productivity and reduced environmental impact are intrinsically linked, so schemes aimed at both benefits could be further developed. It could also be used to develop UK's current knowledge exchange

⁴ [https://ahdb.org.uk/brexit/documents/What can the UK learn from New Zealand subsidy reforms-revised.pdf](https://ahdb.org.uk/brexit/documents/What%20can%20the%20UK%20learn%20from%20New%20Zealand%20subsidy%20reforms-revised.pdf)

systems whose current highly fragmented structure creates an unnecessary barrier to uptake of new technologies. Our thoughts on how the current innovation and knowledge exchange system could be improved are set out in Section 4.

SECTION 4 - A SUCCESSFUL FUTURE FOR FARMING

AHDB welcomes the commitment from Government to work with AHDB to encourage a stronger focus on resource efficiency and sustainable growth. We are pleased to see recognition that improvements in productivity and competitiveness can and should be underpinned by policy'.

Whilst it is believed that England possess some of the most competitive producers in Europe, if not the world, there is unquestionably a wide range in farm business performance. This indicates that the best farmers are able to harness innovation, access the best advice and acquire the skills they need to succeed. However the sheer range in performance indicates that there are systemic and structural barriers that prevent farmers and growers from operating at their optimum. This situation is compounded by weak growth in total factor productivity in UK agriculture and horticulture.

Our recent analysis⁵ identifies the key drivers and barriers to productivity growth. UK agriculture and horticulture suffer from underinvestment in near market research, fragmentation in our knowledge exchange mechanisms and lack of applied, on-farm demonstration. Combined with under-investment in skills and training these factors appear to explain the underlying weakness in productivity growth in the UK.

In our view the solutions require a fundamental overhaul of our knowledge and innovation systems (AKIS) to create a new structure that will accelerate sustainable growth in productivity. It is vital that the opportunity to redesign farm policy in England is also seized to redesign our knowledge and innovation system.

AHDB has identified a five point plan which requires industry and government to work in partnership. Specifically this calls for:

- A new way of overseeing research and innovation funding so that it is driven by the fundamental needs of our industry, rather than the priorities of academic research interests
- The creation of a "What Works" Centre for agriculture: effectively a one-stop-shop for all evidence and best practice of 'what works' in terms of technology, techniques, science and skills to provide a consistent accessible view to farmers, growers and their advisers of best practice
- The opportunity for AHDB to play a central role in co-ordinating knowledge exchange (KE) activities acting as the KE partner to Agritech Innovation Centres and working with private sector providers to ensure consistent, joined-up communication of best practice
- Better skills and training through a new skills framework and employer-led training curricula
- A significant ramping up of farmer to farmer learning and benchmarking to provide more accessible, on farm demonstration across all sectors and all parts of the country - effectively a series of innovation hubs where farmers learn from other farmers on the ground

There is a significant relationship between the ambitions in this section of the consultation paper, the work of the new Food & Drink Sector Council and the recently announced Industrial Strategy Challenge Fund Transforming Food Production programme. It is essential that there is a shared ambition and focus in the arena of innovation, R&D KE and skills between Defra, BEIS DfE and industry delivery partners like AHDB, where considerable work has already been undertaken in these areas.

How can we improve the take-up of knowledge and advice by farmers and land managers? Please rank your top three options by order of preference:

- a) Encouraging benchmarking and farmer-to-farmer learning*
- b) Working with industry to improve standards and coordination*
- c) Better access to skills providers and resources*
- d) Developing formal incentives to encourage training and career development*
- e) Making Continuing Professional Development (CPD) a condition of any future grants or loans*
- f) Other (please specify)*

⁵ https://ahdb.org.uk/documents/Horizon_Driving%20Productivity_Jan2018.pdf

AHDB sees farmer to farmer learning, benchmarking, simplified access to skills and structured support CPD as all being important to improve uptake of best practice on farm. Of fundamental importance is that government and industry work together to create the right structures that best support farmers, address the fragmentation that creates confusion and instigates an effective transmission mechanism to apply research, innovation and best practice on farm. The role of improved leadership and management skills cannot be underestimated in helping the farmers better understand their own business requirements which will in turn drive their full engagement.

There are examples to draw on elsewhere in the UK where joint investment between government and industry has bolstered the ability to improve dissemination of knowledge on farm such as the jointly managed AHDB/QMS monitor farms programme in Scotland, or Farming Connect advisory service in Wales, which works closely with AHDB on underpinning evidence and focus. In addition, there is also an opportunity to harness the food supply chain to disseminate knowledge. Grocery retailers are increasingly building close partnerships with suppliers and partners. Mechanisms such as Tesco's Supplier Network provide online platforms for sharing knowledge. AHDB is increasingly working with retailers and processors to support knowledge exchange programmes.

What are the priority research topics that industry and government should focus on to drive improvements in productivity and resource efficiency? Please rank your top three options by order of importance:

- a) Plant and animal breeding and genetics*
- b) Crop and livestock health and animal welfare*
- c) Data driven smart and precision agriculture*
- d) Managing resources sustainably, including agro-chemicals*
- e) Improving environmental performance, including soil health*
- f) Safety and trust in the supply chain*
- g) Other (please specify)*

All of these areas are seen as key priorities for the industry and echo the areas identified in the NFU's Feeding the Future report⁶ as well as AHDB's six technical and research themes (see below).

How can industry and government put farmers in the driving seat to ensure that agricultural R&D delivers what they need? Please rank your top three options by order of importance:

- a) Encouraging a stronger focus on near-market applied agricultural R&D*
- b) Bringing groups of farms together in research syndicates to deliver practical solutions*
- c) Accelerating the 'proof of concept' testing of novel approaches to agricultural constraints*
- d) Giving the farming industry a greater say in setting the strategic direction for research funding*
- e) Other (please specify)*

AHDB supports wholeheartedly the determination to put farmers in the driving seat of agricultural R&D. We currently invest over £15m in applied research which is funded by farmers, growers and the supply chain via the levy mechanism. Our research and wider technical activity spans 6 core themes:

- Realising genetic potential in plants and animals
- Building sustainable plant and animal health
- Managing resources efficiently and sustainably
- Driving precision technology into practice
- Facilitating wholesome and trusted food in the supply chain
- Honing business and technical skills

As important as levy investment in applied research is to enabling a more sustainable, resilient and productive industry, it is largely seen as insufficient to the needs of the industry. It is also dwarfed by the investment made collectively by government and the research councils in agricultural R&D.

⁶ <https://www.nfuonline.com/cross-sector/science-and-technology/research-and-innovation-news/feeding-the-future-four-years-on-a-review-of-innovation-needs-for-british-farming/>

A number of elements are critical to an effective AKIS for agriculture, food and the supply chain:

- The UK's fundamental and applied research agenda in agriculture and horticulture needs to be driven by the needs of the industry. It should be governed by a mechanism that gives farmers, growers and the supply chain a significant say in informing research priorities
- A greater priority must be attached to funding of near market research with a strategic approach to commissioning research that focusses effort on overcoming key productivity challenges
- Effective feedback loops that allow intelligence about industry constraints/requirements to be fed back into the research and evidence bases so that the work programme can be modified accordingly
- The creation of an 'Innovation Accelerator' to de-risk the early stage development of innovative products and services and encourage informed capital investment in appropriate technology
- Removal of constraints on the use of statutory levies to provide industry match-funding so that farmers and growers can co-invest with government to address research priorities. This model is deployed effectively in other parts of the world such as Australia
- Success measures for the whole research and innovation programme should be based on improvements in sustainability and productivity in the UK farming and food industry

What are the main barriers to adopting new technology and ideas on-farm, and how can we overcome them?

In our view the main barriers are

- The broken pipeline and fragmentation of effort in terms of the UK's current knowledge exchange systems
- A need for farmers to gain confidence in new technology by seeing it applied in practical farming context.

This highlights a case for a series of regional innovation and demonstration hubs. AHDB's Strategic and Monitor farms as well as wider farm networks such as the RSK-ADAS Yield Enhancement Network (YEN), Agri-EPI's satellite farms, the college farm network and the Soil Association's Innovative Farmers programme could all be harnessed to provide the on-farm platforms to showcase novel approaches.

This network is scalable. Government support could helpfully bolster the number and range of regional innovation and demonstration hubs. But it must also be co-ordinated. AHDB is well positioned to co-ordinate disparate activities to bolster farmer to farmer learning and act as the knowledge exchange partner for the Agritech centres.

Government could also kick-start investment to create an accessible, digital 'What Works' centre that makes accessible a wide range of validated knowledge, innovation and tools to the industry.

Understanding learning styles and behavioural approaches is vital to accelerating uptake on farm. It can't simply be a case of producing factsheets. AHDB has recently been working on social sciences with the aim of better understanding how social and emotional intelligence effects decision making and behaviour in farm businesses. This work will further develop our communication strategies with the industry to achieve greater impact on farm.

What are the priority skills gaps across UK agriculture? Please rank your top three options by order of importance:

- a) *Business / financial*
- b) *Risk management*
- c) *Leadership*
- d) *Engineering*
- e) *Manufacturing*
- f) *Research*
- g) *Other (please specify)*

The degree of change required will vary from business to business but there is a clear need for more businesses to develop and implement business management, people and leadership skills. This support needs to come via a structured, open access mechanism that raises awareness of actual business needs

and directs people to activities that will positively influence productivity gains. Guidance is required to recruit the right staff to support business objectives and subsequently to retain these staff, especially at a time where labour shortages could pose a serious threat to business viability.

Improved skills and expertise should not be limited to farmers. It is also important that suppliers, trading partners and those providing support (e.g. levy bodies, consultants, agronomists, vets), have well trained and skilled staff able to close the gap.

Investment into agricultural engineering to support emergent automated agricultural solutions would not only enable the UK to once again become a global leader but would go a long way to address the labour shortages. This would enable us to not only tackle our productivity gap but also enable a growth in our manufacturing base and further enhance export opportunities.

Finally improving skills and capability in understanding how to harness and use data as well as better understanding of the end to end food supply chain should not be ignored.

What can industry do to help make agriculture and land management a great career choice?

The farming industry is widely perceived as a low skilled sector because of the lack of formal qualifications and structured CPD. A coordinated programme is required with careers professionals to demonstrate the real opportunities available as these are the key influencers of new entrants. For training provision to truly become industry led, current FE/HE funding structures need to recognise employability figures and support courses with a clear direction of supporting the drive to increase productivity and sustainability. Finally, it is important that training and skills from stockman through to farm manager are professional recognised and accredited.

How can government support industry to build the resilience of the agricultural sector to meet labour demand?

As well as underpinning the pipeline of a talented, skilled workforce through an industry/ employer led training curriculum, government's primary role must be to support investment in technology that reduces dependency on labour for certain activities and brings about a revolution in farming technology to be data driven, automated and 'lean'. This requires not only strategic investment in science but a transmission mechanism that showcases and demonstrates technology on farm and drives commercial demand.

SECTION 5 - PUBLIC MONEY FOR PUBLIC GOODS

AHDB's current activities include a number of programmes of work to support farmers in delivering non-marketable public goods. These include:

- A wide range of environmental programmes focussed on soil fertility and improvement, nutrient management, integrated pest management and water quality
- Programmes to improve animal health and welfare such as BVD-free initiative, research into animal welfare best practice
- Management and co-ordination of industry data relating to animal health and AMR, including management of the pig e-medicines book and pilots in the beef & dairy sectors
- Knowledge exchange programmes focussed on productivity growth

We believe that productivity and delivery of public goods frequently go hand in hand. To highlight an example, AHDB's work to improve fertility in dairy cattle through the use of genetic indices and investment in genomics not only helps improve the lifetime productivity of cattle. It has also contributed to improved longevity of cattle, reducing the need to breed replacements. This in turn reduces greenhouse gas emissions from the dairy sector and improvements in animal health and welfare.

Seeking out these 'win wins' through programmes that deliver gains for the environment, health and welfare and productivity must be a priority in policy development. Due to long production cycles in animal production, and increasingly volatile markets, any policy needs to include clear market signals and policy longevity.

Which of the environmental outcomes listed below do you consider to be the most important public goods that government should support? Please rank your top three options by order of importance:

- Improved soil health*
- Improved water quality*
- Better air quality*
- Increased biodiversity*
- Climate change mitigation*
- Enhanced beauty, heritage and engagement with the natural environment*

Prioritising these outcomes is extremely challenging and needs to be made more objective on the basis of objective measures. At the macro level indicators of environmental outcomes such as emissions, biodiversity and water quality can be used to assess where the greatest priorities may lie. Input measures (for example nitrogen use on farms) can also play a role in assessing where the performance of the industry is getting better or worse.

At the micro level, farmers and growers need tools to measure their environmental impact in a way that is simple and easy to use. Working with other partners, AHDB has developed the Environmental and Agricultural Resource Efficiency Tool (EaGRET) which could be developed and promoted as a means of assessing and benchmarking environmental performance on farm⁷.

Priorities will be dependent on location, situation and other influencers or receptors and should be based on assessment of need. There are clearly relationships between all of the above environmental outcomes, for example, improved soil health will promote biodiversity and contribute to better water quality.

For agricultural productivity and environmental sustainability to be maximised, it is crucial that soil structure and nutrients be managed as efficiently as possible. AHDB invests in a wide range of research and knowledge transfer activities to help the industry manage its soils better. Details can be found here: <https://ahdb.org.uk/projects/Soils.aspx>

⁷ <https://ahdb.org.uk/projects/ResourceUseEfficiency.aspx> and [https://cereals.ahdb.org.uk/publications/2016/april/11/ahdb-environmental-and-agricultural-resource-efficiency-tool-\(eagret\).aspx](https://cereals.ahdb.org.uk/publications/2016/april/11/ahdb-environmental-and-agricultural-resource-efficiency-tool-(eagret).aspx).

Of the other options listed below, which do you consider to be the most important public goods that government should support? Please rank your top three options by order of importance:

- a) *World-class animal welfare*
- b) *High animal health standards*
- c) *Protection of crops, tree, plant and bee health*
- d) *Improved productivity and competitiveness*
- e) *Preserving rural resilience and traditional farming and landscapes in the uplands*
- f) *Public access to the countryside*

The consultation rightly identifies a broad range of public benefits that a new agricultural policy in England should deliver and to rank these in order of importance would be very challenging. There may be some guiding principles that could inform priorities:

1. *Where does evidence identify need is greatest*
2. *What insight tells us about the goods society values (but that the market will not reward)*
3. *Delivery of which goods satisfies multiple objectives – i.e. seek out the win wins that achieve growth in productivity/ performance as well as environmental or other outcomes*
4. *Ease and ability translate goods into practical, deliverable and quantifiable programmes on the ground*

The following comments offer a view on some of the specific public goods mentioned in the consultation paper:

World class animal welfare

Although it may be laudable and desirable to pursue higher animal welfare outcomes, it is widely perceived that UK animal welfare standards are already deemed to be higher than in many of our trading partners. Identifying objectively what is meant by world class animal welfare is important. Ultimately the measure of success should be based on objectively measurable outcomes (for example, lower levels of lameness in cattle. AHDB's work in the pork sector on welfare outcomes provides an example of how industry can work with scientists to demonstrate performance in an objective and independent way⁸.

Higher standards come at a financial cost to UK farmers and evidence shows that this extra cost would not be borne by consumers. Therefore it is correct to assume that additional measures to promote higher standards or outcomes must be rewarded through the public purse

Crop protection

There is an opportunity to incentivise and reward more environmentally benign approaches to crop protection that could have positive impacts on bees and other non-pest species. The adoption of an integrated pest management (IPM) approach could deliver benefits to soil health, water quality and biodiversity through reduced impacts.

To change from the existing system to one that uses less impactful methods will require a transition from the old to the new and will involve significant amounts of education and learning and probably additional costs. Whilst AHDB is sponsoring work on the application of IPM in some crops there is still much to be researched and implemented for this to become a reality, especially in arable cropping where most benefit might be accrued. If public money is to be made available for public goods there is a need to recognise that changing systems may provide a way to deliver environmental benefits whilst improving resilience and at the same time ensuring the financial viability of farming.

A proportion of damage occurring in agricultural and horticultural crops is because of the introduction of new pests and diseases into the UK. A robust biosecurity policy to prevent the introduction of these organisms could contribute to more profitable farming whilst reducing the risk to the natural environment. Having access to the necessary crop protection tools and products and the skills to know when conventional and low-impact products are best used will be necessary for both crop and environmental protection.

⁸ <http://pork.ahdb.org.uk/health-welfare/welfare/real-welfare/>

Improved productivity and competitiveness

Improving productivity and competitiveness is a key public good and a legitimate use of government support to bolster industry efforts to improve performance. Increasing productivity will increase competitiveness through increasing the efficiency with which inputs are turned to outputs. It will also offer environmental benefits through optimum management of natural resources.

AHDB's recent report highlights that our productivity has lagged behind that of other countries, including our EU neighbours⁹. Addressing this challenge is critical to achieving the vision set out in Health and Harmony and should be seen as the overriding challenge for the next decade and beyond. Our report provides more details of the key drivers and causes of the decline in productivity growth. Our response to Section 4 articulates the solutions.

Are there any other public goods which you think the government should support?

Other public goods that may warrant consideration include connecting children and the community with farming, on farm educational activities and community outreach activities.

It could be argued that monitoring pests is a public good. Government already supports UKCPVS and with respect to managing risk, this is one area where a small amount of Government funding could keep costs down in the future. The overarching driver is to develop a suite of tools, including those above, that when combined with varietal selection, resistance monitoring, accurate agronomy, rotations and selection of sowing date, amongst others, can be used to drive integrated pest management forward delivering a productive, economically viable and sustainable approach for agriculture and horticulture.

Government investment in animal disease surveillance also plays an important part in enabling both industry and government to mitigate risks of disease incursion to the UK and deal rapidly with threats as they emerge. A particularly prominent concern in the pig sector is the risk of spread for African Swine Fever.

⁹ https://ahdb.org.uk/documents/Horizon_Driving%20Productivity_Jan2018.pdf

SECTION 6 - ENHANCING OUR ENVIRONMENT

AHDB's existing portfolio of activities aimed at enhancing the farmed environment extends across wide range of areas. Notably AHDB has:

- Played an integral role in the Green House Gas Action Plan partnership and development of Sector environmental Roadmaps
- Undertaken projects to support pig farmers in measuring and managing ammonia emissions
- Instigated Great Soils, an extensive long-term programme of research and knowledge exchange focussed on better soil management across all farming sectors (<https://ahdb.org.uk/projects/greatsoils.aspx>) Improving soils has benefits for both productivity and the environment, although results should be evaluated over the long term since financial returns to farmers will not be immediate.
- Led industry activities on integrated pest management and biopesticides, launching the major SCEPTRE Plus programme of work on plant health and protection cover horticultural crops <https://horticulture.ahdb.org.uk/sceptreplus>
- Produced guides, factsheets and disseminated knowledge to farmers on water management, irrigation and field drainage across potatoes, cereals and horticultural crops
- Taken over responsibility for managing the Fertiliser Manual (RB209) to help farmers minimise diffuse water pollution through targeted management of on-farm nutrients <https://ahdb.org.uk/projects/RB209.aspx>

AHDB is well placed to support farmers and growers with the development and delivery of practical tools to improve environmental outcomes on farm. The priority be simple tools that can be delivered practically on farms and enable business to deliver multiple benefits.

From the list below, please select which outcomes would be best achieved by incentivising action across a number of farms or other land parcels in a future environmental land management system:

- a) *Recreation*
- b) *Water quality*
- c) *Flood mitigation*
- d) *Habitat restoration*
- e) *Species recovery*
- f) *Soil quality*
- g) *Cultural heritage*
- h) *Carbon sequestration and greenhouse gas reduction*
- i) *Air quality*
- j) *Woodlands and forestry*
- k) *Other (please specify)*

It is impossible to offer a ranking on such complex and interrelated environmental and societal factors.

Rather than focus on specific outcomes it may be more appropriate to identify the tools that producers can put in place that deliver multiple benefits – environmental, economic and social outcomes. A good example in this regard is rewarding nutrient planning. Optimum use of on-farm nutrients based on understanding of crop & grassland uptake and needs leads to lower levels of leaching, diffuse pollution and lower costs. Carbon calculators are being successfully used to reduce emissions in ruminants and reduce production costs¹⁰.

It will be critical to ensure that farmers can measure, demonstrate and benchmark their environmental performance in a consistent and simple way. This calls for an easy to use, integrated tool that covers a number of environmental outcomes. As highlighted in Section 5, there is an opportunity to harness AHDB's environmental benchmarking tool, EaGRET. The tool builds on existing work, including the Sustainable Intensification Platform, the GHG Inventory, the Natural Capital Explorer modelling & assessment work,

¹⁰ <https://www.teagasc.ie/media/website/about/our-organisation/Bord-Bia-Beef-Carbon-Navigator-LR4.pdf>

regional emissions from biofuels cultivation work and ADAS's Farmscoper tool to provide a new comprehensive farm-level environmental benchmarking tool that can be deployed for use by farmers as well as report for Defra.

Regardless of the environmental priorities, a key barrier to improved environmental outcomes is the fragmented nature of knowledge exchange in the UK and limited on-farm demonstration of best practice. There is an opportunity to improve uptake of good practice through applied demonstration and farmer to farming. Our responses in Section 4 provide significant more detail on how such a programme could be scaled up and co-ordinated.

The concept of joint initiatives should be supported and allows greater penetration and also increase the effectiveness especially if land and farms involved are adjacent or in close proximity.

SECTION 7 - FULFILLING OUR RESPONSIBILITY TO ANIMALS

Activities to tackle industry challenges in relation to animal health and welfare form a significant part of AHDB's current activities. Prominent examples include:

- Management of the electronic medicine books for pigs with pilot projects underway in cattle
- Partnering with RUMA to tackle antibiotic usage across pigs, cattle and sheep
- Delivery of the eAML2 movement licensing regime for pigs
- Endemic diseases programmes to tackle persistent endemic disease challenges such as mastitis, lameness and bovine respiratory disease
- Funding and leading the BVD (bovine viral diarrhoea) free initiative
- Supporting the work of industry health and welfare forums - the Cattle Health and Welfare Group (CHAWG), Sheep Health and Welfare Group (SHAWG) and Pig Health and Welfare Council (PHWC)

In addition, AHDB is working with Defra and other partners to explore the opportunity to bring about a step change in livestock data and traceability through the Livestock Identification Programme (LIP) and Livestock Identification and Data Exchange Hub (LIDEH).

The critical questions in this section surround the creation of the, as yet unpublished, animal health 'pathway' and the proposal to establish a new partnership body to oversee its delivery. As an overall view, AHDB believes that the current delivery structure in relation to animal health and welfare is highly fragmented and lacks clear accountability to a single, co-ordinated strategy. This must be addressed as a priority which will require leadership from government and industry.

Whatever the outcome of the consultation, AHDB has an important role to play in supporting the work of a new partnership board, especially in co-ordinating knowledge exchange delivery across farmers, growers and the supply chain. The key risk is creating a structure that adds to the existing confusion, fragmentation and lack of accountability.

Should government set further standards to ensure greater consistency and understanding of welfare information at the point of purchase? Please indicate a single preference of the below options:

Our insight shows that the consumers lack understanding of current labelling schemes. Food labels have become increasingly sophisticated combining a range of legal requirements along with brand messaging, provenance and other requirements, there is a risk of adding to confusion. Any change to labelling should be consumer led. The Red Tractor already provides an effective means of identifying that food produced in the UK has been reared to our high standards of animal welfare. We do not detect a strong appetite from retailers for any new labelling schemes.

What type of action do you feel is most likely to have the biggest impact on improving animal health on farms? Please rank your top three choices from the below list, in order of importance:

Of the areas set out in the consultation, on balance we believe the following three could be identified as priorities.

1. Transparent and easily accessible data
2. Supporting vets to provide targeted animal health advice
3. Making it easier for retailers and other parts of the supply chain to recognise and reward higher standards of animal health

a) Use of regulation to ensure action is taken

Examples elsewhere in the world and here in the UK demonstrate that regulation can be an effective tool in improving animal health.

It is important that regulations are based on a thorough review of the scientific evidence and an understanding of human behaviour and of industry logistics. The success in eliminating Bovine Spongiform Encephalopathy in the UK was largely the result of strict regulation. Compulsory schemes for the elimination of Bovine Viral Diarrhoea (BVD) in Scandinavia, Switzerland, Germany, Belgium, Ireland, Northern Ireland and Switzerland have all made rapid progress.

In a number of European countries there is a legal requirement to report antimicrobial use in livestock to a central database – including Sweden, Denmark, Germany and the Netherlands. The UK has to date taken a partnership approach with the industry taking the lead on data collection. If a system was expected to capture 100% of data on antimicrobial usage it is likely that some form of regulation would be required, probably at the point of dispensing rather than on farm.

Even in the absence of strict enforcement by Government, rules and regulations help set the context for expected behaviour and industry can assist in developing compliance. It is also not always necessary for Government to regulate. While the Code of Recommendations for Welfare generally act as a guideline relative to current legislation they could include recommendations which go beyond the minimum requirements and illustrate best practice.

b) Use of financial incentives to support action

Penalties and incentives work best where the parameter to be influenced is objective, has a sound evidence base and can be measured independently off-farm. It is more difficult to develop incentives where there is an element of subjectivity in the measurement (e.g. mobility scoring, Body Condition Scoring), and if the evidence base for effective corrective action is limited.

In many cases significant capital investments are needed to improve production systems therefore rather than incentives for action it may be as appropriate to consider measures to stimulate investment.

c) Supporting vets to provide targeted animal health advice on

Veterinarians play an important role in the delivery of animal health advice and in developing active health planning. A key challenge is to make health plans more effective and active. Quarterly visits with health plans, such as AHDB's mastitis plan is an example of good practice and could be replicated in other disease areas. It is crucial that vets receive training to ensure the information they give farmers is consistent.

This involves not just technical expertise but also communication and facilitation skills and an understanding of how to help change behaviour of animal keepers. There has been some interesting work at the University of Bristol on the feasibility of utilising evidence-based communication (Motivational Interviewing) to improve the uptake of advice on cattle health and to inspire on-farm change. Thought should be given to integrating communication skills into postgraduate training programmes for animal health.

As farming systems have become more specialised there is also a need for additional training in tackling production limiting conditions for those who work on farm, for vets and for others who supply services e.g. foot trimmers. Research funded by AHDB and its predecessors developed the evidence base for the AHDB Dairy Mastitis Control Plan (DMCP). The Mastitis Control Plan provides a structured, co-ordinated approach to understanding and solving mastitis problems in dairy herds, Trained DMCP Plan Deliverers, most of whom are vets, develop a bespoke plan for individual farms depending on the farm's own circumstances.

The British Cattle Veterinary Association (BCVA), Sheep Veterinary Society (SVS) and Pig Veterinary Society (PVS) all play an important role in continuing professional development for vets. However, there is scope to set more challenging minimum targets for CPD requirements for vets – the New Zealand Veterinary Council requirements are more stringent than those of the Royal College of Veterinary Surgeons.

Changes may be needed in the models for delivery of veterinary advice which would provide vet practices with an income from improvements in health on farm. In the Netherlands a mixture of self-regulation and government legislation has tightened the level of control of veterinary medicines. Farms must have a one-to-one contract with a vet and every farm must have an annually evaluated Farm Treatment Plan as well as a Farm Health Plan which is signed, binding and audited annually. In Denmark dispensing of medicines by veterinarians for the treatment of animals under their care has been limited to non-profit sales since 1995. In both the Netherlands and Denmark farm vets are audited every 1-2 years by a certified organisation or by Government respectively.

d) Making it easier for retailers and other parts of the supply chain to recognise and reward higher standards of animal health

e) An industry body with responsibility for promoting animal health

The important consideration here is to avoid duplication and creating an additional structure that adds to the fragmentation rather than driving alignment and clear accountability of existing structures. AHDB has an important role to play with government in bringing about the change that is necessary to create a clear, streamlined pathway

f) Research and knowledge exchange

There does not appear to be clear overall national strategy for agricultural research with clear goals. Much of the animal health research focuses on specific diseases in isolation while on farms there is a complex mix of challenges. Systems research appears to have fallen out of favour and although the contact between researchers and farmers had become very limited there are promising signs of greater engagement in recent years. Research into preventative approaches, especially vaccines would support improvements in productivity and reduce reliance on antibiotics.

AHDB sees a core part of its mission as leading and co-ordinating knowledge exchange to the industry.

g) Transparent and easily accessible data

Collecting, integrating and sharing data from a variety of sources will enable the early detection and characterisation of livestock disease to inform the better targeting and timing of interventions for its management that maximise their effectiveness, optimise use of resources, and minimise any negative impacts. There is a dearth of data and information on the performance of medicines, vaccines and other interventions in field situations. Collecting data on outcomes as well as use would fill this gap in our knowledge.

Data collection and analysis will only be maximised if they are linked to decision support systems which are constantly being evaluated and refined. It is also clear that the weak link in the chain of data collection is the human element and that automation and facilitation of data collection, storage will be key. Many companies are active in developing tools and applications and there is a growing need for standards which permit the universal exchange of data and which would allow the data to be anonymised but still associated with useful metadata. This would allow for more rapid progress without raising concerns over personal privacy.

AHDB has an integral role here as demonstrated by our involvement in the Livestock Improvement Programme (LIP) and LIDEH.

How can the government best support industry to develop an ambitious plan to tackle endemic diseases and drive up animal health standards?

Government and industry should work in partnership to better co-ordinate initiatives and to better define joint delivery groups. This also requires long term funding and commitment if initiatives are to reach those farmers who most need to engage.

SECTION 8 - SUPPORTING RURAL COMMUNITIES AND REMOTE FARMING

How should farming, land management and rural communities continue to be supported to deliver environmental, social and cultural benefits in the uplands?

AHDB has recently undertaken work on behalf of the Lake District National Parks Authority¹¹ examining the impact of Brexit on farms in the uplands. This demonstrates that upland farmers are particularly vulnerable to the removal of direct payments and Pillar 2 type support. Our study demonstrates that it is not just the overall level of support, but also the pattern of distribution and uptake that is important for outcomes in these upland areas. Farmers want to farm successfully and profitably and not become a farming Disneyland, existing just as a visual resource, but a thriving, productive and profitable industry. Beef and sheep farmers in the uplands will face particular challenges in terms of adapting to a world without direct support. Nonetheless we believe there are opportunities to work with producers and communities in the uplands to ensure that production becomes more market focussed and productive.

Ultimately a clear destination is needed – is the intrinsic value of uplands agriculture based on the provision of public goods, food production or both, if the destination is more heavily skewed towards environmental and other public goods the industry will need support to undergo a major transformation programme. AHDB's involvement in delivering initiatives aimed at hard to reach farmers such as the Princes Countryside Fund means that we have significant experience in building and shaping tailored knowledge exchange and extension programmes in upland areas.

¹¹ <https://ahdb.org.uk/brexit/documents/Lake%20District%20National%20Park%20Report.pdf>

SECTION 9 – CHANGING REGULATORY CULTURE

AHDB has no comment to make in this section.

SECTION 10 - RISK MANAGEMENT AND RESILIENCE

What additional skills, data and tools would help better manage volatility in agricultural production and revenues for (a) farm businesses and (b) insurance providers?

Risk and resilience are familiar issues for farmers and uncertainty is inherent in agriculture. Adapting and managing risk will be even more critical to farm businesses in a post-Brexit world.

The AHDB already focuses on risk management and resilience. Indeed, the AHDB led volatility forum aimed to uncover industry led solutions for managing volatility. By bringing ideas of practical approaches that farm businesses could use to increase resilience and manage risk, a consistent framework for farm business resilience was developed. The framework focuses on five core areas:

- Relentless Cost Management
- Market Engagement
- Commercial Acumen
- Collaborative Approach
- Technical Excellence

This framework formed the basis for a series of Risk and Resilience Workshops as part of a Defra funded initiative under the EU Adjustment Aid Scheme in 2016. This saw practical business advice given to over 350 businesses and over 200 bespoke action plans developed as a result, with AHDB helping farmers identify, understand and focus on risk areas. Capitalising on these practical approaches to risk and resilience is critical, helping to build the overall competitiveness of our agricultural industry.

Commercial mechanisms are already in place in some sectors in the form of futures and options markets. Whilst established in cereals, their existence in other agricultural markets is sporadic. Touted as a mechanism for managing risk in dairy markets in the last couple of years, little progress has been made to date. Similarly, maintaining liquidity in existing agricultural markets can be a challenge, particularly when purchasing power is increasingly concentrated. For example, LIFFE ceased trading potato futures back in 2002 citing low volumes and it should be remembered that every seller needs a buyer, even on futures markets.

Futures and options can be complex to use. Farmers need to fully understand the risk they are managing and evaluate the effectiveness of different approaches. This is why the AHDB has delivered futures workshops across the country in the past and it is why our market intelligence team track and evaluate different futures marketing strategies every crop year.

In terms of risk management basics, knowing your cost of production is critical. AHDB has prioritised Farmbench, a user-friendly and intuitive tool to help farmers understand and compare full costs of production¹². Ambitious targets are set for the uptake of Farmbench across farming sectors and a key part of competitiveness is the focus on cost management that AHDB identified as part of the risk management framework. To be successful, businesses need to understand the full economic and cash costs of production at the enterprise level accounting for internal transfers e.g. straw from arable to livestock enterprise. Farmers need to understand risk and have risk management skills to better anticipate problems and reduce consequences; knowing their current situation is the natural starting point.

Commercial acumen and market understanding are two other areas of the framework. These interconnected areas are where levy organisations have historically played a role and where AHDB is currently upping its game. Core output includes the collation and processing of primary data (over half a

¹² <https://farmbench.ahdb.org.uk/>

million pieces of data are processed every week) and the publishing of monthly, weekly and even daily analysis and insight across agricultural sectors.

Having gained the internationally-recognised ISO 9001 quality certification for our primary data provision, AHDB's data outputs are based on a robust foundation of data handling processes and management procedures. When it comes to agricultural data, AHDB is recognised for safeguarding the quality, efficiency and consistency of market intelligence primary data. A routine understanding of current input and output prices allows farm businesses to continually update their view of the market, assess relevant risks and put subsequent actions in place.

At the other end of the supply chain, our organisation provides a wealth of consumer and retail intelligence and conducts in-depth industry analysis. Indeed, the AHDB strategy already recognises our role in helping the agri-food sector better anticipate the needs and demands of the marketplace. We recognise that transparency and trust in the agri-food sector can be improved. Existing AHDB data already has a pivotal role, recognised for our independence and track record, and we are supportive of improved data availability, access and use in the agricultural sector.

How can current arrangements for managing market crises and providing crisis support be improved?

As stated previously, developing and delivering workshops emerged from a crisis situation in the dairy sector. A series of sector dashboards that AHDB continue to provide to the industry emerged directly from work that a Defra group undertook on farm resilience in 2013/4 and a recognised need to access key information in a 'one stop shop' format. More widely, however, AHDB believes that there is a broader challenge of establishing risk as a fundamental aspect of business planning. This is an approach that the organisation continues to develop, whether that is exploring different business scenarios, establishing industry level Key Performance Indicators, or simply asking industry some challenging questions. Farm businesses cannot remove risk or market volatility, but AHDB is doing more to help them develop contingencies, understand their options and improve their risk planning.

SECTION 11 - PROTECTING CROP, TREE, PLANT AND BEE HEALTH

What support, if any, can the government offer to promote the development of a bio-secure supply chain across the forestry, horticulture and beekeeping sectors?

The need for farmers and growers to protect their crops is essential not only for the viability of businesses but also to secure the supply of a safe, high quality product to the public. Crop protection does not just ensure the yield but is an integral part of preventing the occurrence of biological contaminants such as ergot and other mycotoxins. An IPM approach is to be encouraged and is already widely used but would benefit from additional research funds and could be developed further. A role for government is to ensure there is sufficient investment in research in this area that can sit alongside industry contributions.

The need for strong biosecurity to prevent the introduction of new damaging organisms is of key importance to protect production and the wider natural environment. There are opportunities to distance the risk of plant material imports by ensuring the exporting countries have a high level of biosecurity capacity and are able to undertake inspections at the site of production. This prevents the problem arriving in the UK in the first place and is the start of the creation of a biosecure supply chain. Since the threat from alien species affects both crops and the natural environment there is a need for Government to coordinate, lead and support biosecurity efforts between industry, landowners and both local and national government.

AHDB's work is intended to target and cover the development and provision of the tools necessary to produce food and ornamental crops to high quality and safety standards. Activities include securing crop protection chemistry for specialist crop production using both conventional and biologically based products, developing diagnostic tests for disease identification, forecasting of pest and disease outbreaks and monitoring pest populations are all targeted at providing accurate and timely information to growers to make better decisions with regard to any pest control activities thereby reducing costs and minimising any environmental impacts.

SECTION 12 - ENSURING FAIRNESS IN THE SUPPLY CHAIN

How can we improve transparency and relationships across the food supply chain? Please rank your top three options by order of importance:

- a) Promoting Producer Organisations and other formal structures?*
- b) Introducing statutory codes of conduct?*
- c) Improving the provision of data on volumes, stocks and prices etc.?*
- d) Other (please specify)?*

As highlighted in section 10, AHDB already plays a key role in supporting market transparency in the supply chain. Better information means better business decisions. Data outputs include essential business information relating to pricing, production, trade, consumption and stocks. Consistent, accurate and independent market intelligence is a core activity of AHDB and covers the broad range of farming sectors (pork, beef, lamb, dairy, potatoes, cereals and oilseeds). With a foundation in the collation and processing of primary data (over half a million pieces of data are processed every week), AHDB publishes of monthly, weekly and even daily analysis and insight across agricultural sectors. As well as our own publications, our data and insight is re-published widely, particularly as a staple of farming publications. In addition, AHDB currently provide data as part of mandatory price reporting requirements (e.g. deadweight beef price) and as part of a Defra contract (e.g. cereals supply and usage statistics; price reporting for pigs, sheep & cereals; TB compensation values).

Existing AHDB data already has a pivotal role, recognised for our independence and track record, and we are supportive of improved data availability, access and use in the agricultural sector. In the event of further requirements across the supply chain to report information on markets, volumes and prices, AHDB has the track record, skills and accreditation to provide independence and transparency of available data.

What are the most important benefits that collaboration between farmers and other parts of the supply chain can bring? How could government help to enable this?

The supply chain could play a much bigger role in managing risk and volatility if there was more vertical integration in the industry. The value of well-functioning supply chains is both in strengthening our competitiveness (supply chains compete not individual businesses) and in far better management of volatility (both the size of the chain and often volatility doesn't affect all the chain at once). This could be an area for Government to support a programme to examine how it could further assist in the development of world-class supply chains in the UK, for instance building on the government funded Industry Forum work from the mid-2000's.

SECTION 14 - INTERNATIONAL TRADE

How far do you agree or disagree with the broad priorities set out in the trade chapter?

The government has set out a determination to export more food and agricultural products in order to deliver benefits to the whole economy. This is an ambition that AHDB supports.

We have shown that limited but dedicated support in China, through the role of Food and Agriculture Counsellor has delivered considerable benefits. This partnership model where dedicated in-market personnel are co-funded between industry (AHDB) and government is scalable and could be extended to other markets such as USA, South America and the rest of South East Asia. There are further opportunities to deliver benefits through the role of Veterinary Counsellors in-country to address further market access technical challenges and ensure continued trade to existing markets.

The ambition needs to be set against the backdrop of the UK being a major net importer of food meaning that there remains, with the right ambition and support, an opportunity to displace imports through competing more effectively in our home market.

In addition, we need to take an objective view of the UK's export strengths and weaknesses. The UK isn't the only country with a good story to tell. We're often behind the curve in exploiting markets compared to other EU countries like Denmark and Ireland. Exporting requires a different mind-set, seeing overseas markets as a prized opportunity rather than a potential low value outlet. What may be viewed as a by-product at home, may be highly valued to another consumer – we need to recognise and treat it as such. In addition, the UK is far from the most competitive exporter and our scale is small, therefore identifying and exploiting niches is critical.

AHDB's recent report on international consumer attitudes identifies some of the challenges and pitfalls to seeking to market overseas on the basis of higher standards¹³. A one size fits all approach needs to be avoided if the industry is to maximise the benefits of overseas trade. The report emphasises the need for industry to monitor and adapt to the needs of each marketplace to create more opportunities.

How can government and industry work together to open up new markets

AHDB has dedicated resource and expertise to support market access and international market development work. We already work with stakeholders to identify opportunities and then closely with Government Departments including DEFRA, FSA, APHA etc. to provide the necessary industry and technical documentation and facilitate inward inspection visits to demonstrate the high quality and legal compliance of our sectors to achieve market access approval. We provide a platform for exporters to enter markets with the necessary information and support via our networks and facilitate trade to add value to the UK sectors. We do this through in-market presence/support with representatives, trade events and inward/outward missions, alongside relevant market information and analysis to identify opportunities. Further, we work closely with Defra and related Government departments to agree export conditions with regard to SPS factors that are appropriate and realistic and advise/support industry to deliver these.

Working in partnership with Government and exporters, AHDB has helped increase the value of pork exports from £166m in 2007 to £470m in 2017. This partnership is readily scalable and could help the industry unlock new opportunities.

It is essential that non-tariff barriers are not allowed to distort trade opportunities through protectionism and any conditions are science and evidence based. Any such barriers have the potential to close viable trade activity and result in loss of potential market value.

Fundamental to export trade is a clean bill of health for our animals and other products. History has shown that BSE and Foot and Mouth disease not only caused devastation to our domestic production but also

¹³ https://ahdb.org.uk/documents/Horizon_InterConsumer-march2018.pdf

destroyed any chance of exporting product to certain markets for many years. Leaving the EU could mean that this market access becomes significantly harder in the future. Therefore it is important to control imports of both human and animal feed stocks into the country.

Export certification demands are likely to increase substantially given that they may be a requirement for EU countries as well. This is likely to need considerably more resources to prevent the process slowing down successful trade. Further, the opportunities to develop an electronic system for Export Health Certification (EHC's) is being investigated and AHDB supports this progress. What is clear is that Government resourcing and financing is needed to develop this if we are to have a world-class and efficient system that will support trade.

Continuing to promote the UK brand through the Great British Food Unit is essential. In addition, Ministerial visits and advocacy to promote trade overseas and a proactive programme of inward visits from the regulatory authorities in key overseas markets ensures raised awareness of UK meat and dairy production and builds confidence and the UK's reputation.

How can we best protect and promote our brand, remaining global leaders in environmental protection, food safety, and in standards of production and animal welfare?

The aforementioned report on international consumer attitudes provides insight into how consumers in several key export markets perceive British food and offers guidance to potential exports. This complements earlier reports looking at the prospects for meat and dairy products¹⁴ and cereals¹⁵.

Researching and understanding overseas markets and consumers is critical to export trade development. Product needs in overseas markets may be very different from the UK. This is not only applicable for processed goods but also for carcase and product specifications. This may therefore have knock-on implications for producers. Gaining an understanding of supply chains, sales channels and purchasing drivers is also key. These may be quite different depending upon the country and product.

The ongoing explosion of the middle classes in emerging markets across the globe is shaping both a demand for protein and, often, imported foods. Over the next 10 years, the Organisation for Economic Co-operation and Development (OECD) in collaboration with the United Nations Food and Agriculture Organization (FAO) has projected that combined global imports of beef, lamb, pork and dairy products will grow by 16%. In many respects, the UK is well placed to capitalise on overseas market growth in demand for meat and dairy. The UK 'brand' bears hallmarks of quality and heritage in the products we sell overseas. Nonetheless, we aren't the only country with a good story to tell nor the most competitive.

While high-quality milling and malting products will most probably continue to be exported, the trade in feed-quality grains is very dependent on beneficial exchange rates and market access. Scale is never going to be in favour of domestic producers. The competition domestic producers will face in new markets with bulk grain shipments against competitors with lower costs of production will be intense. This means understanding their businesses, benchmarking costs and systematically seeking to improve performance are farmer's best form of protection. But what's apparent is that the trade dynamics for bulk grain will shift. It means identifying, understanding and targeting the niche opportunities when it comes to exports.

Moreover, it highlights the potential competition domestic producers could face in the home market too. The supply chain needs to quickly develop a more collaborative approach and move on from a short-term view. That helps farmers to supply consistent quality to processors, it helps them to be fleet-footed when export opportunities arise and to be increasingly responsive to customer demands.

¹⁴ https://ahdb.org.uk/documents/Horizon_Meat&Dairy_2018-01-31.pdf

¹⁵ https://ahdb.org.uk/documents/Horizon_Brexit_Analysis_june2017.PDF

SECTION 13 – DEVOLUTION: MAINTAINING COHESION AND FLEXIBILITY

AHDB has no comment to make in this section.