

THE C&PCA AGRI TECH STRATEGY

SUMMARY REPORT

NOT FOR WIDER CIRCULATION

1. The Starting Point

In terms of the development of a strategy for the CPCA region, the area has particular strengths in arable crops and horticulture, and to a lesser extent, in pigs and poultry. Dairy and the other livestock sectors are less well represented.

The region also has significant strengths in science, R&D, food processing and a track record of innovation and attracting inward investment. The main strengths of the region's agri tech sector include:

- agricultural sectors: Arable and horticulture (especially field vegetables), pigs and poultry
- R&D: crop breeding, crop protection, agri tech innovation
- academia & centres of excellence: Cambridge University, NIAB, Agri Tech E etc
- Supply chain: food processing, distribution hubs etc
- landscape: Grade 1 Fenland, arable, field vegetables and salads excellence
- synergies: Bio tech, AI and the academia sum being greater than individual parts
- leading networking and catalysing organisations: Agri Tech E and the Eastern Agri-Tech Growth Initiative are both very good examples

The CPCA region has attributes of a strong agri tech sector and which would be envied by all other parts of the UK.

There are already robust and established networks in the sector both in the CPCA region, the wider East Anglia area and in the UK. A clearer signposting of how to access these networks, who are they for and what are the benefits for participants is not least required.

The challenge is that they are often caught in a trap of chasing short term funding streams and in some cases, understandably, in the absence of an over arching regional plan, following their own strategy.

What is missing is the sense of direction for the region's (agri tech) sector per se and the willingness to bring together quite a large number, of at times, disparate groups/organisations who all have a vested interest in the agri tech industry.

2. The Need For A Strategy – “Policy Push” & “Commercial Pull”

The UK agri tech sector, and not least that of the CPCA, is about to face something akin to a “perfect storm”:

- UK Agricultural Bill – this is all about farming for public goods - not just production, as in the past
- Brexit - it is still uncertain as to the final outcome
- the impact of potential new trade deals - not least with the US and then Oceania
- the National Food Strategy led by Henry Dimbleby for a healthier diet for the nation etc
- the UK government 25 Year Environmental Plan
- the UK government Agri Tech Strategy
- COVID - 19 impacts - these are more on the food processing sector, consumer and customer behaviour than at farm level

“Supply chain shocks” tend to accelerate what is already happening - and recent history shows there will be another one in 2 years, of some sort. In these challenging times, “the Best” will thrive - but some will inevitably fall by the wayside at all stage of the supply chain.

The other huge driver for change in the UK is the more commercial “pull” of the major retailers and food processors in the UK. The UK market is highly competitive. Those players operating at the point of sale have also been impacted by a whole range of factors over the last 10 years, such as the development of the discount chains in the UK, the move to online retailing, the need for NPD and innovation in food product and the need to meet a demand for environmentally friendly and sustainably produced food. And all of this, at often, no additional cost.

The short and even mid term impact of COVID - 19 is looking like a prolonged economic down turn, and as a result, pressure on consumer incomes, the type of food they purchase and where they purchase it from and how. This, in turn, will place more pressure on farmers and food companies to be able to produce agricultural and food products which are not only highly cost efficient, but also to a high environmental standard and level of sustainability.

The big difference is that the Agricultural Bill – although the direction of change is clear, will take around 7 years to unwind in full. A new trade deal with the US still might take several years to fully negotiate and then be followed by an implementation period.

But a change in procurement policy by a leading supermarket or a food processor can see change happen almost overnight. While there are several “policy push” drivers in the UK for the uptake of agri tech - and these will influence the future direction of farming, the “commercial pull” factors are probably even stronger as an agent of change.

If in these circumstances, the potential of the CPCA agri tech industry is to be fully realised though, the region needs a strong narrative and vision of where this sector really wants to be in the next 5, 10 and 20 years. The region's main strength is the full suite of resources already located in the region and close by, and having Cambridge at its core, but this needs to come together in a more coherent and joined up fashion.

3. What's Going Well?

There a number of recent developments in the CPCA agri food sector which have been focused around the Peterborough region. These include:

- **AM Fresh** - a major fresh food firm, created up to 180 new jobs in Peterborough when it moved into a huge warehouse, distribution and manufacturing facility on the 180 acre Gateway Peterborough site after discussions with the Department of International Trade and Opportunity Peterborough
- **Lidl** - is set to open a £70 million regional distribution centre in Peterborough – the 450,000 sq. ft facility is replacing an existing smaller warehouse in Lutterworth
- **McCormick** - a global leader in food flavours, announced its decision to base its UK flavours facility in Peterborough in September. It is expected that the new development might create up to 300 new jobs
- **Barn4** - a purpose built Cambridge agri tech incubator. This gives start-up access to sector specific expertise and laboratory facilities is to be co-located on the NIAB Park Farm site in Histon. The Barn4 development was supported by a £2.5 million funding from the CPCA. It will provide facilities for up to 15 companies with 45 staff

It can be seen that inward investment to the CPCA region has continued to flow in to the region, despite the potential threat and challenges faced by the region, which include Brexit and the impact of COVID – 19, etc.

It underlines the fundamental attraction of the region as a destination for agri tech investment. It has happened without a specific strategy in place for the agri tech sector. With a more defined strategy in place, we believe that the opportunities for further inward investment, job creation etc. can only be enhanced still further.

While the "Cambridge Effect" is strong, this strategy needs to involve the full region.

Any strategy developed will clearly need the buy in and support of the region's key stakeholders from both the public and private sector to be successful.

A perfectly valid question is "what would happen if there was no strategy"? The agri tech sector in the CPCA region is about to face something of a "perfect storm" from a range of ongoing "commercial pull" factors as well as "policy push" factors.

In this situation, some developments would still probably happen, as they have over the last few months. It is surely best though to have a strategy in place to set the desired direction of travel for what, at some stage, will be more certain times ahead.

There is an opportunity for the CPCA region to take a national lead in the development of the UK agri tech sector.

4. Different Player Types Have Different Needs

The needs of different players across the region in the development of a robust agri tech strategy will vary. Whilst the strategy may eventually be disproportionately influenced by the larger organisations and businesses across the region, government and local authority policy is to provide a nurturing and fertile growth environment for businesses of all sizes from start-ups to SME through to the larger more established businesses.

The larger organisations generally want access to key decision makers across the region, improvements in the physical infrastructure, planning processes etc.

The SME and start-up companies in the region need more help with activities such as networking, business introductions, access to trained and skilled labour, access to funding streams, training and business growth support.

Changing behaviour especially of SMEs especially – takes time – do they really care about a “strategy” as such - maybe not, what they really want to know is where and how to access funds, grants and build networks in order to create jobs, invest in R&D etc. This will make a difference to them, not just a “nicely written strategy”.

The region's agri tech base is made up of a high percentage of these SME type businesses. Their customer base can be from within the CPCA region, to the rest of the UK and internationally. Their customer base though, especially in the future, is just as likely to be well outside the CPCA region as in it.

5. A Focus To The Region's Agri Tech Offer

Whilst being fortunate in having representation in nearly all agri food sectors, there are some that are viewed by those both inside and outside the region that the CPCA region genuinely excels in.

The resource base of the CPCA region is wide, other countries/regions, especially outside the UK often go for a strategy based on what they really excel at in a relatively small number of areas of genuine agri tech excellence.

Good examples might be:

- **The Netherlands** - the agri tech strategy is based around dairy, greenhouse horticulture, pigs and poultry, where they are rated as world leaders

- **New Zealand** - look to promote their world wide expertise in the agri tech sector in areas such as dairy, beef and sheep
- **Denmark** – look to leverage their expertise in pig production in to the agri tech sector
- **Norway** - aim to develop agri tech expertise in areas such as fish farming in particular

This is not to say they do not look to develop in other areas of the agri food sector - they will of course – but they have a strong sector focus based on “what they are best at”. The CPCA region should follow this lead.

A strategy though of trying to be “all things to all people” will inevitably lead to a dilution of effort and a failure to really maximise the clear agri tech potential of the region. It is very hard to be “the best” at everything. Yet this is what the agri tech needs such are the challenges it faces in the years to come ahead.

The challenge with this type of strategy is that the selection of these “best practice” areas is too narrow and might even lead to a sense of exclusion of some. This does not have to be the case, but it is strongly advocated the CPCA strategy is based around a small number of core areas of genuine expertise.

The CPCA region is also in the fortunate position, both geographically and with its R&D resources, that is also easily able to collaborate within a relatively short distance with other UK organisations to compliment any gaps in the agri tech offer there might be.

6. Aligned Strongly To Wider Strategies & Challenges

The CPCA agri tech sector will not maximise its potential by operating in isolation. A major part of the strategy should be to align it to other key sectors of the CPCA region (such as ICT, advanced manufacturing and life sciences, with which there are clear linkages and synergies) UK government policy and strategy on agri tech and the major challenges that the agri food sector faces.

At the same time, it needs to be noted that the agri tech sector is in competition with these other sectors in term of human, financial and physical resources too, but there are still opportunities for synergies to be taken advantage of in the future.

The areas of the CPCA strategy that the agri tech strategy should therefore be aligned to are as follows:

- improving the region's capacity for long term growth by increasing productivity
- increasing the overall sustainability of the region per se and widening the base of economic growth
- expanding and building the existing networks and clusters that exist in the region, not necessarily creating new ones

- building on other areas of regional strength and importance such as life sciences, digital and IT technology and advanced manufacturing – at the same time, recognising they are also in competition with each other for human, physical and financial resources

In terms of the areas that are of key importance to the agri food sector – these are driven by a combination of “policy push” and “commercial pull” factors and include the following:

- climate change mitigation
- development of carbon neutral supply chains and sustainable systems
- more efficient use of water resources
- automation in the supply chain, including the use of robotics
- the use of Big Data
- increased productivity, competitiveness and resilience across the supply chain

The CPCA regional agri tech strategy should be based around two key disciplines:

- supply chain technologies
- environmental and sustainability expertise

The combination of these “policy push” and “commercial pull” factors and the need to farm and produce food in a more sustainable, efficient manner in the future, make an ideal backdrop to the future uptake of agri tech products and technologies.

While the “policy push” factors are a key driver for this uptake, it will be the “commercial pull” that acts as a stronger and quicker force for change.

7. BREXIT

At the time of writing, the final outcome of Brexit is still unknown. What is clear though is that regardless of the sort of Brexit we end up with, the real impact will be to speed up the changes we are already seeing in the agri tech sector. Despite the uncertainty though, there are some things that are clear:

- the UK will develop its own agricultural policy independent of the Common Agricultural Policy (the new Agricultural Bill). This will encourage farmers to produce goods for “the public good” in a more environmentally sustainable manner - and not just for production
- to be able to survive and thrive in any post Brexit environment, virtually regardless of the outcome, farmers in the CPCA region will need to strive to be:

- in the top quartile of industry performers
- and probably (but not always) be operating at an increased scale

The use of agri tech products, service and technologies can help achieve these objectives.

With regards to access to EU markets, a Hard Brexit would clearly make exporting both agri food products, as well as agri tech products and services more difficult. A Hard Brexit might also see the opportunity to replace EU imports of agricultural and food products, but this will take a combination of access to land, access to finance, access to labour and time: maybe 3 - 5 years.

In the meantime, EU suppliers of both food products and agri tech services might well decide to come “on shore” and invest in the UK agri food and agri tech infrastructure.

8. Post COVID -19 Implications

The overall impact of COVID - 19 has been more apparent in the food processing sector, rather than farming, with the sudden shut down of factories involved with meat plants, sandwiches etc. which has caused severe supply chain disruption and financial stress.

There have, and will continue to be, a number of other impacts, as follows:

- all suppliers and supermarkets which still dominate the UK point of sale, will stress test the robustness of their supply chains and we might well see the shortening of these as a result
- the move towards online buying and selling will be accelerated and there will be a trend towards more home preparation of food and demand for convenience foods
- shopping habits will change, with consumers opting to buy food on a more localised basis
- issues that were important before March 2020 to the supply chain will not go away. These include areas such as plastics reduction, water usage, meeting the challenge and in some cases, the opportunities of climate change etc

The experience to date is that no one is immune from the impact of COVID - 19 regardless of size or age of business

The ongoing pressure in the retail market as discount chains continue to gain ground on the big four retailers (i.e. Tesco, JS, Asda and Morrisons) and at the expense the higher value retailers such as M & S and Waitrose. It is reported that some supermarkets have requested significant price discounts over the rest of the year from their suppliers. This is a direct result of the predicted down turn in the economy that we have begun to already see.

As a result, farming and food businesses in the CPCA region need to be more agile and resilient than ever before and not all are going to make it through this challenging period. The full impact of a supply chain shock such as COVID – 19 will be to speed up change/trends already

taking place in the market. The economic situation in the UK for the next 12 months looks very challenging indeed. This will impact on the full supply chain from consumers back to farmers and all intermediate stages.

Of course, all this change can bring opportunity for the well informed/well prepared etc. and this period might be a turning point for agri tech in the next 12 months.

The CPCA agri tech offer can contribute to all the challenges being faced both short and long term in UK agri food.

Farmers and food/agri tech companies in the CPCA region will all need to focus on being as flexible, adaptable and resilient as possible. COVID - 19 impacts and the ongoing uncertainty over Brexit are something of a double challenge and are all accentuated by the threat of supply chain price pressures that seem likely to follow over the next 6 – 12 months and beyond.

The CPCA strategy on COVID -19 implications (taken from the CPCA COVID - 19 framework report) of the wider region and which are relevant the agri tech sector, are likely to be:

- *Disintermediation of services in retail and hospitality leading to fewer entry level jobs* – the agri tech sector suffers from labour access issues currently which have been made worse because of COVID -19. Many jobs in the sector are still entry level roles
- *Countries turning 'inward' to secure domestic supplies* – the CPCA region is well placed to be able to fulfil domestic requirements both from a primary production, food processing and supply chain logistics perspective
- *Level which post COVID - 19 conditions drive further labour saving automation and/or the use of contingent labour* – The CPCA agri-tech sector has already started along the journey of labour saving automation and is well placed to act upon this trend
- *Impact on inequalities for groups and communities* – the CPCA region covers both economically favoured and more economically challenged regions. Innovations such as work and educational activities transacted over large geographical areas may have benefits for those living in more rural locations
- *Speed up the rollout of 5G and superfast broadband across the CPCA region* – lack of connectivity has been shown to be a barrier in enabling businesses to access Agri Tech therefore improvement in connectivity should have a positive effect on agri tech engagement

The development of an agri tech strategy can link strongly to, and compliment, all these objectives and more recent COVID - 19 implications.

One major challenge that may occur of course may be that CPCA and UK government agri tech and innovation funding budget cuts due to the longer-term economic impact of COVID – 19. This could see some of the longer term regional and national technology and agri-tech

commitments may be re-designated to short term economic recovery plans to deal with the current COVID - 19 crisis and the region's economic recovery. This would almost certainly see some loss of momentum to the development of the CPCA agri tech sector.

9. Agri Tech Demand & Supply Knows No Geographic Limits

In the future, there is likely to be a strong demand for agri tech products and technologies, not just from the CPCA region, but from across the rest of the UK and worldwide.

From the online survey carried out as part of this strategy development exercise, it seems that many potential customers of the CPCA agri tech cluster do not look to the immediate region for the source of their "agri tech". They are just as likely to be sourcing this from other parts of the UK or in some cases from internationally based providers.

UK farming and food companies have often shown they are less concerned about where the agri tech comes from - but more about "what it will deliver" (in terms of commercial and environmental benefits).

Agri tech products and services customers will base their purchasing decision on who can provide the best solution to their problem regardless of where they are located. Agri tech products and services are just as likely to be procured from other provider based on the Continent, Oceania and the US as they are from within the CPCA region.

There is clearly a gap to be filled here by promoting the region's capability on its own door step. This should be a relatively easy task to do. "Selling" and promoting the CPCA regions agri tech capability to the local region, should be regarded as tackling the "low hanging fruit".

This willingness to "buy elsewhere" is a reflection in some ways of the cosmopolitan nature of the UK food and drink sector. Only 8 of the top 20 food and drink companies in the UK are actually still British owned. The CPCA region is no different in this respect to the rest of the UK. The UK food and drink sector is therefore exposed to a wide range of international cultures. This filters down in to the purchasing of agri tech kit, products and services.

While there is still work to be done in promoting the CPCA regions agri tech offer within the region itself, and maybe too other parts of the UK, we believe there is a huge opportunity to promote these to the rest of the world too. UK expertise and technology in agriculture and food is often admired and respected in many other parts of the world too. The CPCA region would be at the very heart of this.

It is difficult to quantify this, but we believe it to be well beyond the potential that can achieved just in the CPCA region alone. This would represent, of course, a considerable challenge. The world is full of other agri tech providers in the US, the rest of the EU, Oceania, Latin America and the Middle East.

There are particular opportunities where the issues of developing sustainable farming and food production/processing systems are especially acute. This could include areas of the world such as the Middle East, India, China and parts of Africa. This list is not intended to be exclusive.

These are also areas of the world where inward investment to the UK and the CPCA region's agri food and agri tech sectors may well come from.

This probably, not least, also underlines the need to have a small number of core areas that the CPCA region excels in and can promote. It would take a very focused and determined effort to develop a global presence for the CPCA agri tech sector, but this is the size of the prize on offer.

When looking at the 'export' potential of the CPCA agri tech offer, it also needs to be clear where the value of that export lies: is the value retained within the region supporting jobs and increasing local GVA, or does the value leave the region with highly trained specialist who take their skills and knowledge away from the region and therefore no longer contributing economically to the CPCA region.

The option of retaining value in the CPCA region is a better than the other.

10. Agri Tech – The Full Supply Chain, Not Just Bits Of It

The agri tech challenges that are faced are found across the supply chain - by solving an issue in one part of the supply chain (i.e. farming) and not addressing others, such as in distribution, processing and retailing/foodservice can leave gaps. The strength of the CPCA agri food sector, and wider UK, is as much in its supply chain expertise as anywhere else.

The CPCA region has some world class farming businesses, fantastic food and drink processing companies and excellent R&D institutions. It also supplies into market segments that the UK excels in - which are our leading retail and foodservice sectors.

To be able to supply them, businesses in the UK need to be right at the top of their game. There are about 200 of these in the UK. A good number of them are based in the CPCA region. The total number of food and drink businesses in the UK are c. 9,000. The world class nature of the UK retail sector has driven excellence across the supply chain. This now includes the agri tech sector.

Joining up the supply chain and working together is something of a universal challenge. It probably applies to all sectors (going back 30 years or so) of the economy - not just agriculture and food. As a result, the aspiration to do this has been there for a long time.

It has often been difficult to achieve, mainly as a result of the nature of the so called "chain competition" that exists between the leading supermarkets in the UK. This has seen supply chains become more integrated and stream lined over the last 20 years or so. Producers and processors have gradually become more aligned to just a few key customers and see themselves as being in competition with other producers and processors. These can often be based in the same region as themselves and not in other regions of the UK, or other countries, as in the past.

This is not an issue confined to the CPCA region alone. It exists in most other regions of the UK too. It does though mean that "linking up supply chains" across a region has become more problematic.

This does not mean to say there haven't been attempts in the past to do this. The likes of the cluster work carried out by the regional development agencies in the 1990s looked to do just this. It has, though, proved though to be far more difficult to achieve. Yet with the "perfect storm" that the region faces, it is more important to do this than maybe ever before (to join up the supply chain more comprehensively than has been seen in the past).

If the CPCA regions agri tech sector is to be fully joined up, the challenge of this needs to be recognised. It will take time to do finally achieve this - and certainly more than 3 - 5 years. There is though no need to start from scratch though. Much of what is required is in place to develop a thriving agri tech sector across the CPCA region.

Many of the issues that being faced in the CPCA region, in terms of farming and producing food, are also seen in other parts of the world. These often relate to the mitigation of climate change, reduction of carbon emissions, the management of water supplies, reduction of food waste in the supply chain and at the same time, increasing productivity. The CPCA agri tech offer should be about promoting to the region, the rest of the UK and then the rest of the world – not the expertise in bits of the supply chain, but the totality of the supply chain. This would include input supply, crop and livestock production, R &D, food processing, education and training, retailing and distribution.

11. Work With Others To Maximise Potential To The CPCA Region

The CPCA region, despite its obvious strengths in the agri tech sector, is still a relatively small geographic region. The CPCA narrative has to be about the immediate region, of course, but should include links as appropriate to the rest of the UK – such as in the livestock sectors. The bigger picture and size of the prize is greater than the individual parts.

Working together with other regions appears to be a stated government policy - this can be seen through initiatives such as the funding available via the Strength in Places programme. This encourages regions to work together and exploit their potential beyond their own immediate post codes.

Another good example is the Eastern Agri-Tech Growth Initiative. This is designed to support the development of new and innovative ideas within the agri tech sector. It is of course run by the CPCA, with grants open to businesses located within Cambridgeshire, Peterborough, Norfolk, Suffolk, Rutland, North Hertfordshire, South Holland, South Kesteven and Uttlesford.

With the "perfect storm" that the CPCA region now faces – the time has come to broaden the thinking on this and how the real potential of the region can be fulfilled.

This will not be easy, but does not mean to say it should not be the final objective. To maximise the potential of the CPCA agri tech sector, it will be necessary to form close working relationships with other providers in the UK that are outside of the CPCA region.

The diagram below shows how the CPCA agri tech sector is ideally placed both in location and capability to sit in the centre of the wider industry within the UK. By becoming a collaborator and partner with these other providers and sectors, the CPCA agri tech sector can create synergies much greater than the individual parts.



Good examples just in the educational and R&D include Rothamsted in Hertfordshire, the John Innes Research Centre in Norfolk and the University of Lincolnshire. It also includes the 4 centres of excellence under the UK Agri Tech Strategy.

The CPCA region can do a lot – but not all on its own. Only by linking strongly with others operating in complimentary areas of the agri tech sector will the full potential of the CPCA region be realised.

12. Be Bold – Think Outside The Region As Well As Inside - To Be A Net Winner

This will require the CPCA to have a bold vision for what it really wants in the future - a bit of the pie which is what it already has - or substantial chunk of it? To maximise the full potential of the CPCA region in the agri tech sector, there has to be a recognition that this can only be achieved by working willingly and in partnership, as appropriate, with other organisations from outside the CPCA post code area. This requires a new way of thinking, not least about access to potential funding streams and other forms of financial and investment support.

The benefits of genuine and mid to long term collaboration with other parts of the region, UK, and indeed other parts of the world, far outweigh any sense that the CPCA region might be “missing out” on opportunities in the agri tech sector.

As the leading region in the UK for agri tech, the CPCA region has as much to gain by taking this sort of approach as anyone else. The CPCA region could emerge as a net winner.

If an international dimension to the development of the CPCA agri tech offer is to be developed, it also implies building networks and relationships with like minded organisations across the supply chain in markets, well away from the UK too.

13. Get Support Across The Spectrum

If the CPCA is to take a major lead on the development of agri tech in the UK, it needs to get support for this not just from within the region, but also at a higher national level - not least where the real money is for this. This implies dialogue with DEFRA, DIT and even more importantly, at BEIS/HM Treasury level.

This should be spearheaded by the CPCA Business Board and a small number of people from the agri food sector itself across the region (this is packed full of really good calibre individuals from equally good companies).

It also needs to be supported by the regions MPs, who need to be fully bought in to not just the potential that the agri tech sector can deliver, but the resources it might inevitably need to achieve this. It also has to be bought in to as well at a more local level (i.e. Councils, the Business Board etc.) if this is to really succeed.

14. What Might the Future Look Like?

The agri tech sector in the Cambridgeshire and Peterborough region, as with many other parts of the agri food sector in the UK and the rest of the economy, at least in the near future, faces an uncertain future.

This is due to a combination of the unresolved process of Brexit, the impact of COVID - 19 and the threats presented by new international trade deals, in particular one with the US, and the implementation of the New Agricultural Bill. Add to this the ongoing "commercial pull" of the leading retailers and food processors.

There will inevitably be disruption in the supply chain. Not all companies and businesses/organisations will make it through what will be a very challenging period.

Brexit, however, will be resolved. New international trade deals will be developed - but will take time to implement. A solution to COVID – 19 will be found. The new Agricultural Bill will come in to place and farmers and food companies will adapt to this. The "commercial pull" of leading food processors, retailers and foodservice companies will not go away and indeed might well intensify in the future.

All these threats will impact on the CPCA agri food sector in the same way they will impact on other UK regions and industry sectors. And in some cases, they will provide opportunities too.

Looking past the next 5 years, it is clearer what the future might hold for the CPCA regions agri tech sector. This is based on where the region's agri tech sector has historically come from, how it has evolved and the genuine strengths it has.

To deal with the future opportunities that will be presented to the CPCA region, it is necessary to have sound building blocks in place to take advantage of them. The CPCA region has these in abundance in the agri tech sector compared to other parts of the UK. The region, as we have said, has a good asset base and is well positioned for what will be the more certain times ahead.

What might this look like? Over the next 5-10 years we believe that it will be characterised by a combination of the following:

- the CPCA region will still be an agricultural and horticultural power house in the UK
- the CPCA will still be home to a number of leading agri tech businesses, centres of R&D, academia and supply chain excellence
- the CPCA region could and should can maximise on its networking opportunities to link farmers, agri tech providers, food sector, R&D and academia to enable better collaboration between individual groups
- the CPCA can become a centre of excellence for training and upskilling opportunities in the agri tech and engineering sector through its world class further education, R&D and academic institutions
- there will be fewer farm businesses in the CPCA region - but they will be bigger in size, more consolidated and integrated in to other supply chains
- farmers in the CPCA region will be producing in a more sustainable and efficient manner in response to developments such as the Agricultural Bill
- by creating a strong regional narrative that all industry sectors can be part of, the outside view of the region as a place to invest in will be strengthened
- the CPCA can offer consistent strategy support for local businesses helping them with them sources of funding or signposting to appropriate support
- local CPCA agri tech industries will be more aligned to government policy in terms of moving towards a low carbon supply chain and investment in agri tech
- there will be developments interest all along the supply chain in areas, such as vertical farming, renewable energy and precision agriculture (far more than there is now) but making vertical farming projects “work” will still be a challenge. Only the best will be successful
- there will be more automation and the use of ICT right across and in all stages of the supply chain
- farms focused on primary production will, however, still be a relatively low margin business
- selected CPCA agri food and farm businesses (i.e. the best, not automatically the biggest) will be able to compete effectively in international markets
- the average age of farmers will be lower. They will be more engaged with the uptake of agri tech products, services and technologies

- supermarkets will still play a dominant role although the routes to market to consumers will be more diverse as consumers increasingly buy online
- there will be closer connection between farming, food, health and well being and agri tech will have a strong role to play in this
- there will be a closer connection between agri tech and the other areas that the CPCA region has strengths in such as ICT, advanced manufacturing and the life sciences, even if they remain at times in competition with each other for human, physical and financial resources
- market conditions for agriculture, agri food and agri tech will continue to be volatile. This could be in terms of input and output prices, weather patterns and climate change impacts
- consumers in the UK will be better informed than ever before, will require more transparency as to how food has been produced, by who, where etc. and diets will be more diverse than ever – a combination of local and global, plant and protein based and there will be increased numbers of consumers of vegan and dairy products

Most of the areas mentioned above point to an optimistic future for the CPCA agri tech sector, but will require businesses across the supply chain to respond to the combination of “commercial pull” and “policy push” factors at work. It does give, however a strong basis on which to build an agri tech strategy for the CPCA region.

If businesses across the region do not respond, then the picture could look very different and the future, clearly, not as optimistic.

What we can definitely be sure of is that over the next 10 years, there will be more “supply chain shocks” for the CPCA agri tech sector to contend with.

These could be macro economically, politically, climate or agriculturally induced. In the last 10 years, these sorts of supply chain shocks have happened, on average, every two years. They include the global financial crisis of 2008/9, the outbreak of African Swine Fever (ASF), Brexit and most recently of all, COVID - 19, Where the next supply chain shock will come from or what it will be – we do not know. But we know it will come.

The CPCA region needs to be factoring this in to its future planning in the agri tech sector. Businesses of all shapes and sizes will need to be more resilient and adaptable to these “supply chain shocks” than ever before. We know they are coming. The challenge therefore is to build in resilience to supply chains as a matter of course now.

15. Core Strategy Principles

The core strategy for the CPCA region should be based around 4 key areas as follows:

- Narrative
- Focus
- Integration & synergy with others
- Support business to develop growth

The key points of each should be as follows:

- **The Narrative**

- Have a bold vision for the future of the regions agri tech sector – to consolidate the CPCA region as the leading centre for agri tech in the UK
- Create and promote the strong regional narrative that all industry sectors can be part of, with the outside view of the region as a place to invest in
- Create a positive perception of the work being done in the CPCA agri tech sector to external stakeholders
- Without being too prescriptive, focus on areas where the region has genuine strengths such as the arable and horticultural sector
- Ensure high levels of interaction between academia and the private sector across the region
- Promote the region's capability more effectively to the companies/organisations that are based in the CPCA region & involve the full region
- Gain the buy in and support of the region's key stakeholders from both the public and private sector to be truly successful
- Ensure the strategy covers the full supply chain and not just bits of it – this is where the region is at its strongest

- **Focus**

- The CPCA regional agri tech strategy should also be based around two key disciplines:
 - supply chain technologies
 - environmental and sustainability expertise
- Focus on the areas that are the key drivers of the future use of agri tech such as:
 - climate change mitigation
 - soil health and the role of natural capital

- the development of carbon neutral supply chains and more efficient use of water resources
 - more automation, including the use of robotics, the use of Big Data and increased productivity, competitiveness and resilience across the supply chain
- Ensure additional/new agri tech value is retained as far as possible in the region
- **Integration & Synergy With Others**
 - Recognise that the development of a CPCA agri tech strategy can link strongly to, and compliment, all the objectives of the regional CPCA strategy (& UK agri tech strategy) and the more recent COVID - 19 framework report
 - Gain high level endorsement and funding in the public sector across the region, and in London, for the agri tech sector. CPCA should build on the success of the Eastern Agri-Tech Growth Initiative and its achievements
 - Link strongly to other geographic areas in the UK as appropriate
 - Develop and strengthen existing agri tech networks across the region – not create new ones
 - **Support Business To Develop Growth**
 - Become a centre of excellence for training and upskilling opportunities in the agri tech and engineering sector through its world class further education, R&D and academic institutions
 - Offer consistent strategy support for local businesses helping them with them sources of funding or signposting to appropriate support
 - Look outside the CPCA region for mid to long term growth and partnerships to maximise the real opportunity
 - Provide demonstration facilities for end users to see agri tech in action and for developers to progress ideas

16. The Role Of The Business Board

What is the role of the Business Board in all of this? This comes down to a few key things as follows:

- leverage the influence of the CPCA
- have a small core team to spear head this effort
 - led by the Business Board of the CPCA

- provide strong leadership to fulfil the narrative
- help agri tech businesses become ever more resilient, flexible to volatile and uncertain market conditions – and seize the opportunities that will exist

The CPCA must “pull all the levers” at its disposal to get companies to invest in the region. This can include the use of government influence, grants and incentives, as well as the East of England Agri Tech Growth Initiative.

These core strategies can provide a short, medium and long term plans for the CPCA region which should be resilient enough to withstand the challenges that face the sector, but also seize the opportunities it has in front of it too.

The CPCA region has all the tools it needs to become a national and international leader in the agri tech sector. What it now needs is to adopt this strategy to achieve this.

JG/SH
29/10/20