Strategic Priorities for the Development of the Arable Sector in Northern Ireland.

Summary Report

January 2014

Strategic Priorities for the Development of the Arable Sector of the Agriculture Industry in Northern Ireland.

Ulster Arable Society.

The Ulster Arable Society (UAS) is a membership organisation which brings together people from throughout the arable production, processing and supply industries with a common interest in –

- furthering the competitiveness of the sector;
- fostering knowledge transfer; and
- facilitating the professional development of those working in the sector.

The UAS therefore represents the arable sector which is an important contributor to agricultural output in Northern Ireland in its own right but also underpins the sustainable intensification of the livestock sector through the production of feed inputs and the effective use of excess nutrients from those enterprises. The sector currently utilises in the region of 50,100 hectares to deliver £70 to £80 million of output while supporting the wider Northern Ireland economy and employment through providing input to the animal and food processing industries.

In 2012 the Society identified the need to carry out a comprehensive review of the arable sector in Northern Ireland and through this to-

- identify the changing market requirements;
- illustrate the challenges and opportunities faced in meeting these changing market demands; and
- establish what action those working in and supporting the sector need to take to meet the challenges and capitalise on market opportunities.

The Development Strategy is being published shortly after the Agrifood Strategy Board launched its Strategic Plan for the Agrifood Sector industry “ Going for Growth” and during final negotiations about reform of the Common Agriculture Policy; both of which will have considerable, implications for the arable sector in Northern Ireland. Many of the issues contained in this review restate and support representations made by UAS members during the formulation of these key policy instruments.

The Full Review and Report for the Development of the Arable Sector in Northern Ireland is available to download from the websites of the UAS www.ulsterarablesociety.org or the Managing Agent for the Supply Chain Programme, Countryside Agri-Rural Partnership www.countrysiderural.co.uk.

2. Our Vision for a successful Arable Sector in Northern Ireland.

The industry is confident that through responsible management, expansion can be achieved through sustainable intensification which ensures that the growth is both sustainable and environmentally sensitive. In particular it sees the growth of the sector as a parallel to and not a competitor to the growth in livestock production envisaged in the "AFSB Going For Growth Strategy" published in May 2013.

It is the Societies view that a competitive and sustainable arable sector in Northern Ireland will have –

I. A good understanding of market requirements, based on soundly researched information, ensuring a strong customer focus.
II. Streamlined and efficient supply chains with the various elements working together effectively for their mutual benefit..
III. Good communication and effective working relationships with its customers, including the livestock sectors and food processors.
IV. A flexible and skilled workforce, facilitated by effective training capacity, across all areas of activity – business and financial management as well as technical competence, occupational and food safety. An important contributor to this is a positive public perception of the industry which is a key driver in encouraging investment and attracting young people to enter the industry.
V. Access to up-to-date technical and research information of relevance to Northern Ireland industry; facilitated by effective local knowledge and technology transfer capacity, to increase capability and innovation in the industry.

VI. A strong and co-ordinated voice to effectively promote and represent the interests of the sector to consumers and customers, as well as Government.

VII. Access to funding support to stimulate and support strategic investment based on servicing identified market opportunities.

The delivery of this vision requires the action identified within the individual sector reviews (Section 8) and the Action Plan (Section 11) of the Report.

3. Opportunities for Growth.

The Agrifood Strategy Board strategic Action Plan "Going for Growth" published in May 2013 concentrates on the opportunities within the livestock and horticulture sectors, and makes little reference to the wider arable sector. The UAS however has demonstrated through this comprehensive and rigorous review that the arable sector is of critical importance in delivering the future sustainable development of the whole NI Agrifood Industry.

The following is a summary of the major development opportunities identified within the Report. Specific examples of growth opportunities are provided within each of the Individual Crop Reviews, and actions to deliver this growth are contained in the Action Plan in Section 11 of the Report.

Livestock Feed.

The UAS believes that the livestock sector can best be sustainably developed through the parallel and interlinked development of the arable sector. This belief is based on three key principles –

1. Integrated production systems are the most economically and environmentally sustainable

The vast majority of cereal production in Northern Ireland is used on the farm of production or close to the point of production. Sustained growth of the livestock sector will depend on an equivalent growth in the local arable production.

Arable production sustains intensive livestock production through effective utilisation of excess nutrient from livestock enterprises. This includes both liquid (slurry) and solid fractions and will be increasingly important as livestock numbers increase. Effective utilisation of nutrients is a key component of delivering sustainable intensification and of achieving growth while ensuring that environmental requirements are met.

It makes no economic or environmental sense to import all grain and fertiliser and then export the surplus nutrients – some of which are globally finite. The future must be built on systems which can recycle this nutrient locally in a way which is both safe and environmentally beneficial. Local arable production will be a key component of such systems.

2. Local production meets the requirement for rigorous quality assurance.
Recent food standard scandals have raised public concerns about the ingredients contained in their food. Local production with tailored quality assurance increases consumer confidence and compliments the Food Fortress feed materials scheme recently introduced for imported ingredients.

3. Volatility in both food supply security and price are expected to continue.
As the global demand for feed increases, reserves are tightening and extreme weather events in both producing and importing countries regularly affect world supplies. It is anticipated that price volatility will continue affecting both output values and input costs. All elements of the supply chain must work better together to minimise the impact of such volatility on businesses in the sector and secure supplies to our customers. While local supply cannot eliminate feed security concerns, the availability of local supplies can help buffer short term supply difficulties and contain transport costs.

Protein

With over 300,000 tonnes of soya cake and meal imported into Northern Ireland each year, these feed ingredients are critically important as protein sources for the livestock sector.

Locally produced pulses (peas, beans, lupins) could substitute for imported protein sources in ruminant rations – both on farm and at feed mills. Production system development is required to improve performance and reliability on farm and generate the volumes required by the local feed mills.

Oilseeds and Oil.

Over 200,000 tonnes of oilseed cakes and meals are imported each year yet oilseed rape can be grown successfully in NI and high yields achieved.
Recent developments in plant breeding and feed formulation now mean that rape seed can be used in considerable quantities in broiler rations, without the need for any specialist equipment. These needs can be met by a much increased area of locally grown oilseed rape. In addition, an oilseed extraction facility on the Island of Ireland would enable the extensive use of rape oil in food processing to be met from local production.

Oats.

Ireland has a long tradition and a climate well suited to oat production. The recognition of the health benefits of oats ensures that there is a rapidly growing market at home and abroad for high quality oats for both human food and horse rations. An estimated15,000 tonnes of oat grain is imported each year and local growers have shown that they can meet the quality standards demanded by millers. There is a considerable opportunity,for local production to both substitute for imported oats and to meet the increasing international demand for oat based food products.

Ware Potatoes.

Although consumption has been declining slowly, potatoes still remain a significant crop (over 150,000 tonnes produced each year) and an important element of the Northern Ireland national diet.
The high volumes of washed prepacked potatoes place a strong emphasis on skin finish.

The trend to processed product and convenience pre-prepared ingredients is being met by innovative local companies but sustained innovation is required in this area. Inreasing yields of saleable product remains a challenge.

Seed Potatoes.

The worldwide demand for seed potatoes which meet environmental and market conditions in local markets, remains very substantial, although the competition is strong and the growth is now very largely in developing countries.
A substantial opportunity exists to i) satisfy the worldwide demand for high grade low generation multiplication material and ii) to provide increased volumes of commercial seed in local markets within the British Isles.
Future development will depend on new varieties and disciplined integrated supply chain arrangements.

Energy Crops.

With over 90% of Northern Ireland's energy needs being imported and based on fossil fuels, the opportunities for local renewable energy sources are immense. Energy cropping has a useful contribution to make but requires sustained commitment from Government to provide confidence and competitive commercial margins.

4. Growth Potential

When all these opportunities are combined, an increase in economic output by 2020 from the arable sector of 27% (or £21m) was identified in figures submitted by the Arable Crops, Fruit, Vegetable Subgroup to the Agrifood Strategy Board and are fully endorsed by the Ulster Arable Society.

Sector	**Current (2012) Sector value, £million**	**Prospective (2020) and Sector value, £million***	**Means of Growth / Comments**
Barley	29	31.5	Increase average yield by 0.5t/ha through new varieties and agronomy

Wheat	19.7	28	Increase average yield by 0.5 t/ha through new varieties and improved agronomy. Overall area increase with more OSR and oats as break crops. Change from forage maize to whole-crop wheat.
Oats	2.9	3.7	Increase area by 50% and increase yield by 0.5t/ha Supported by greening requirements for break crops and increasing demand for Oats within animal feed and breakfast cereal/health food markets. Export potential.
Oilseed Rape	0.8	2	Increase area to that of the peak in the early 90's and increase yield to 4.5t/ha Supported by greening requirements, need for break crops and increasing demand for rape-meal in animal feed / rape-oil in food processing.
Protein Crops	< 0.5	1	Replacement of imported protein with local protein crop production for use in the livestock sector. Requires focused R&D to overcome challenges and risks associated with current varieties and production methods. Long term research effort will be required.
Energy Crops	1	5	Biomass can make a significant contribution to the NI Executive target of 10% of renewable heat by 2020 and PFG target of 25% reduction in GHG emissions (relative to 1990 levels) by 2025 and 80% by 2050. If biomass is not home grown it will be imported. Also has considerable employment potential in the associated service sector. Total will include biomass from forest waste as well as energy crops. Stimulated by the DETI RHI and DARD Biomass Challenge funds but planting support also required in view of long lead-in times.
Potatoes Ware	20	21.5	Increased saleable yield. Import substitution (Chipping). Growing for specialist markets such as salad potatoes / added value products
Potatoes Seed	5	7.5	10,000t of seed potatoes exported to UK mainland and used locally; subject to availability of new locally controlled varieties
Total	78.9	100.2	27% increase

*Prospective sector value at current prices.

The figures take no account of the additional employment which will inevitably result from the associated increase in capacity within the processing and service sectors. The capacity for growth could be significantly affected by changes to the Common Agriculture Policy currently under discussion

5. Conditions for Growth.

The Arable Sector is motivated to deliver this growth but to do so needs sustained support from others to provide the environment for industry investment in the necessary resources and technology. The details are contained in Section 11 of the Report but can be summarised as –

Policy

- A carefully tailored capital investment package, linked to strategic development priorities for the sector should be introduced to encourage investment in new on-farm technology, including, precision farming, on-farm storage and first-stage processing.
- The Society would support increased funding for projects with a strong supply chain partnership approach.
- Changes to land tenure arrangements and associated taxation implications must encourage efficient long term land use and facilitate the entry of young people into the industry.
- Fair and equal treatment in any revamp of the Single Farm Payment within the CAP reform package. The sector receives limited other support and should not be expected to carry the environmental obligations and financial penalties for the entire industry.
- The industry already funds research in cereal production through the HGCA and has developed good links with this organisation; however a means needs to be found whereby other sectors can initiate and access research relevant to local needs.

- Strong representation is required at EU level to retain essential fungicides such as triazoles and help slow the development of resistance to crop diseases of critical significance to continued crop production in Northern Ireland. In the Societies view, policy makers do not yet appreciate the severity of the impact which the proposed changes will have on farmers throughout Europe.
- Disease protection must be delivered through effective local Plant Health enforcement supported by relevant scientific expertise.
- Policy decisions must reflect the situation in Northern Ireland and have a sound scientific, factual basis.

Research.

- Access to scientific research programmes on production technology linked to local industry needs is vitally important.
- DARD funded research in cereal crops should supplement that of HGCA where local requirements are not adequately covered by research in other regions.
- Close liaison between AFBI, DARD, HGCA, UFU, UAS and CAFRE is essential and the recently introduced annual liaison meetings should become a permanent feature .
- Co-operation between research workers in AFBI, Teagasc and other regions/countries will deliver cost effective solutions to local problems. For crops such as pulses and potatoes, active steps need to be taken to develop a more structured collaborative multi-regional approach to addressing common industry needs.
- A well resourced and scientifically credible Plant Pathology unit within AFBI is essential to provide industry with rapid disease identification and control guidance as well as supporting Government Agencies in ensuring effective screening of imported plant material.

Education Courses

- Tailored education and training courses are required linked closely to a) the sector development strategy and b) industry needs, rather than being driven by the demands of the validating bodies. The Challenge programmes provide a good basis for this delivery.

- Education provision should be co-ordinated and delivered on an all island basis to maximize use of scarce resources.
- Education should be based on regular industry consultation with strong arable sector representation on CAFRE Advisory Boards and other education bodies.

Business Development through Industry Training, Benchmarking and Knowledge / Technology Transfer

- Access to research results from Home Grown Cereals Authority / Potato Council or elsewhere with interpretation by CAFRE to encourage local adoption is essential. Servicing this critical need depends on the CAFRE team working on crop production and business development being well staffed and resourced.
- Farm scale research and demonstrations, Focus and Monitor Farms linked to arable production are very beneficial.
- Maximise the exchange of information and sharing of expertise with Teagasc and other sources of technical information will maximise use of scarce resources.
- Working in association with organisations such as UAS provides important knowledge transfer routes to commercial growers.

7. Conclusions

The UAS is confident that through responsible management, expansion of the arable sector in Northern Ireland is possible and that this can be achieved through sustainable intensification in a way which ensures that the growth is both sustainable and environmentally sensitive. In particular it sees the growth of the sector as a parallel to and not a competitor to the growth in livestock production envisaged in the “AFSB Going For Growth Strategy” published in May 2013. The Action Plan contained in Section 11 of the full Report identifies the action required to deliver the 29% growth which industry believes could be achieved by 2020.

8. ACKNOWLEDGEMENTS

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