

WHITE PAPER – CROP AREA TRENDS IN SCANDINAVIA AND THE UK

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INTRODUCTION

Background

The Andersons Centre has been providing UK crop area analysis and forecasting services to clients for many years. In the latter half of 2015, it commenced a study to estimate crop areas and trends for selected countries Scandinavia encompassing (Denmark (DK), Finland (FI), Norway (NO) and Sweden (SWE)), in addition to the UK. This white paper reports the key findings and provides insights on future trends in each country and across the region.

Territory Overview

Table 1 provides a summary of agricultural land use across the territory during 2015. It is noteworthy that for 3 of the countries (Finland, Norway and Sweden) they are large countries by land mass, but agricultural area is a small proportion of total land area. Agriculture is centred in the southern regions of these countries. The division of agricultural land use between grass and arable (non-grassland) is irregular; Denmark and Finland have a greater arable area than grassland, whereas Norway, Sweden and the UK have more grassland than all arable combined. Average farm sizes vary considerably from 23 hectares in Norway to 70 in Denmark with a regional average of 79 hectares.

Across Scandinavia, there are almost 8.7 million hectares of utilisable agricultural land which is approximately 7.5% of the total land area. The arable area is estimated at 5.3 million hectares in Scandinavia. In the UK, arable land is estimated at 4.9 million hectares which represents around 28% of the total agricultural area (17.2 million hectares).

REGIONAL OVERVIEW

Table 1 – Overview of Agricultural Land Areas across Scandinavia and the UK - 2015

Factor	Denmark	Finland	Norway	Sweden	Scandinavia	UK	Total
Total Land Area ('000 ha)	4,243	33,843	36,525	40,734	115,345	24,190	139,535
Total Utilisable Agricultural Area (UAA) ('000 ha)	2,570	2,236	985	2,900	8,691	17,200	25,891
Agricultural Land %	62.1%	6.6%	2.7%	7.1%	7.5%	71.1%	18.6%
Total Arable Crop Area ('000ha)	2,030	1,551	330	1,400	5,311	4,900	10,211
Total Grassland ('000ha)	540	685	655	1,500	3,380	12,300	15,680
Average Farm Size (ha)	70	43	23	37	43	147	79

KEY COUNTRY TRENDS

Denmark

Livestock plays a major role as Denmark has around 12.5 million pigs and 1.6 million cows (including 0.5 million dairy cows). It is also a relatively important cereals producer with almost 1.5 million hectares farmed in 2015. There is a relatively even split between wheat and barley with 75-80% of barley is spring sown. The winter wheat area is projected to decrease by 2-4% this year due to late sowing issues in the autumn which has driven the increase in spring barley area. Long-term, the area of barley is forecast to increase further, with decreases projected for wheat and rye, which is currently estimated at 110,000 hectares. The oilseed rape area has increased significantly in Denmark in the last 20 years with the 2015 area estimated at around 190,000 hectares. Although a drop is forecast in 2016, due to sowing issues, the area grown is forecast to recover long-term. Maize production (183,000 ha) has also increased significantly in recent years and is forecast to increase further in the future.

Finland

The main arable regions are in the South and South Western coastal provinces. Northern regions have limited cropping and focus on animal production but pulp & paper is the dominant industry across Finland. Less than 7% of land is agricultural. In 2015, the cereals area was estimated at just over 1.1 million hectares with spring barley representing 45% of this total. Oats is also important with the 2015 area estimated at just over 300,000 ha whilst wheat is estimated at 255,000 ha. For 2016, the wheat area is forecast to increase, driven by exports and a concerted effort by industry to increase wheat production. The winter wheat crop has been affected by winter kill this year. Pulses have shown strong growth recently and this trend is forecast to continue, especially for beans. The oilseed rape area (circa 20,000 ha) is small but is forecast to increase long-term. Protected fruit & vegetable crops (e.g. salads) have also shown growth albeit from small bases.

KEY COUNTRY TRENDS

Norway

Norway, although outside of the EU, is part of the European Economic Area and a European Free Trade Association member. Agriculture accounts for around 2% of national GDP. Norwegian agriculture is the most subsidised in the world (according to the OECD) with around 60% of gross farm receipts coming from the Government. In terms of crop area, cereals is estimated at 277,000 hectares in 2015 with spring barley accounting for 44% of this amount. The wheat area is approaching 90,000 hectares but oats production is also significant, estimated at over 60,000 hectares. Long-term wheat, barley and oats areas are forecast to decline due to increased competition and unpredictable climates. The areas of other arable crops are relatively small in Norway and are generally declining with the exception of field vegetables.

Sweden

The topography of Sweden dictates that much land is unsuitable for farming, and its farmed area (2.9 million ha) is approximately 7% of its total land area. Around half of its agricultural area is grassland as livestock plays a key role. The cereals area is estimated at just over 1 million ha is situated mainly in the south with wheat (444,000 ha) and barley (328,000 ha) being the dominant crops. Oats (171,000 ha) is also significant although its area has been decreasing, mainly due to competition from North America, a trend which is forecast to continue. The wheat area is projected to increase in the coming years, partly at the expense of barley, due to wheat being slightly more profitable. Oilseed rape (93,000 ha) is also of importance. Other crops such as potatoes and sugar beet have relatively small areas (under 30,000 ha) whilst vegetable & horticultural crops (circa 25,000 ha) are projected to decrease in the coming years.

KEY COUNTRY TRENDS

UK

As outlined in Table 1, the UK has the largest agricultural area (17.2 million ha) of the countries covered in this white paper and accounts for almost 60% of the regional total. The UK's arable area is estimated at 4.9 million ha for 2015 and as illustrated in Figure 1, its cereals area, estimated at approximately 3.1 million ha, is significantly larger than the other countries covered in this study.

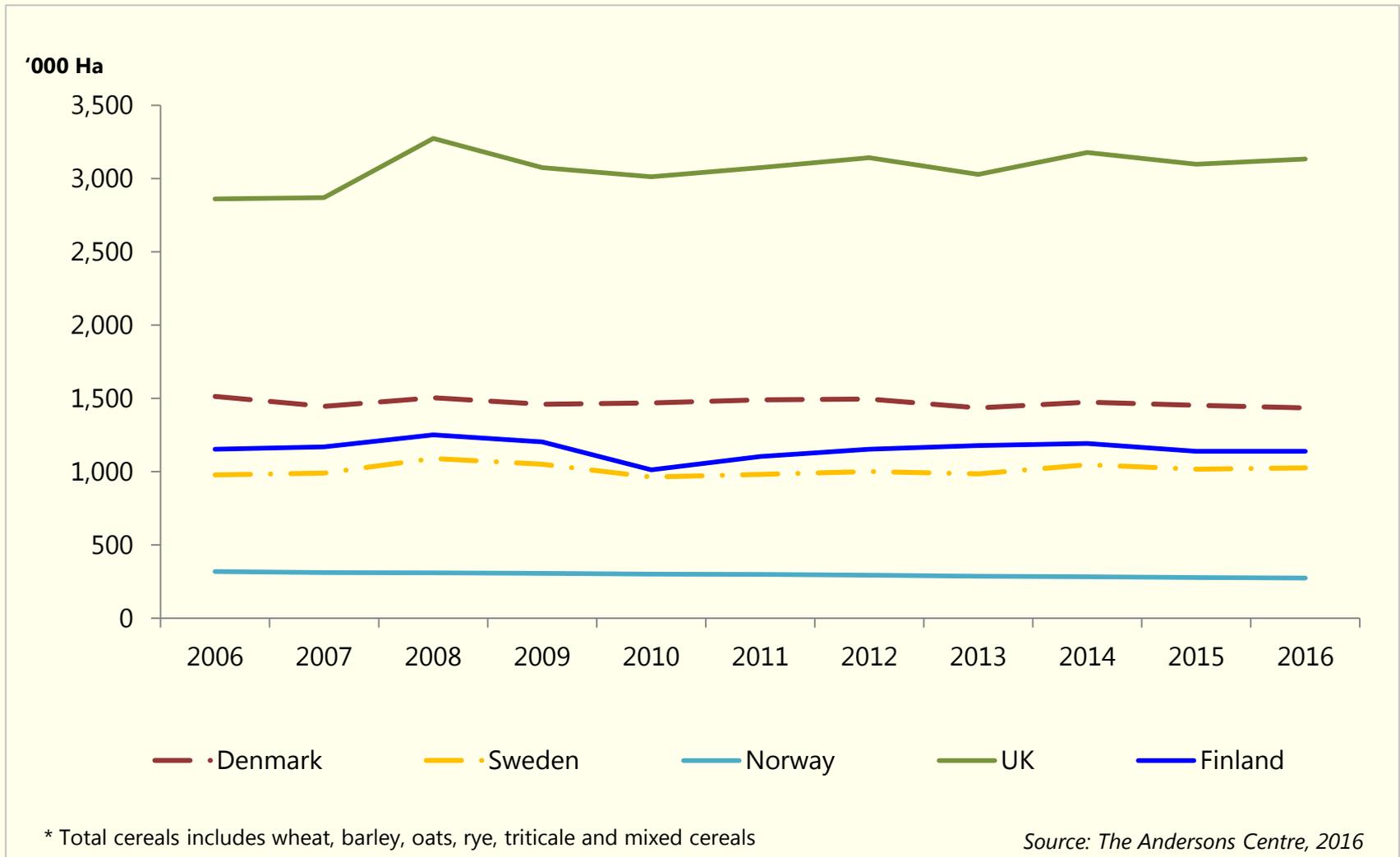
The UK's current wheat area is estimated at over 1.8 million ha, and is down slightly on the 10-year average (1.9 million ha) but is expected to recover in the coming years. The barley area, estimated at just over 1.1 million ha in 2015, is forecast to increase in 2016 driven by increases in spring barley which is forecast to be up by almost 40,000 ha on last year and is being aided by rotational requirements and demand from the value added malting market. There is a decrease forecast in the winter barley area by almost 2% this year and next year further declines are projected in response to lower prices. The oats area is estimated at around 130,000 ha and is forecast to increase in the coming years, driven by increased consumer demand.

The oilseed rape area, estimated at around 645,000 ha on 2015, is forecast to fall further in 2016 as restrictions on neonicotinoids have an impact. This trend is forecast to continue but has been compensated for by increases in pulses and maize. Both of these crop areas are forecast to increase long-term but maize is projected to rise at a stronger rate, although it is noteworthy that AD deployment is decelerating. Potatoes (circa 130,000 ha) have decreased on previous years and this trend is expected to continue. Similar to most countries in the region, the sugar beet crop area (circa 90,000 ha) is also declining.

Vegetable and horticultural crops are grown on approximately 170,000 ha with field vegetables (e.g. carrots, onions, parsnips) accounting for almost half of this amount. For this category as a whole, a relatively stable trend is forecast in future years.

KEY COUNTRY TRENDS

Figure 1 – Overview of Total Cereals Crop Area Trends in Scandinavia and the UK – 2006 to 2016



CONCLUDING REMARKS

Taking Scandinavia as a whole, the total arable area is forecast to decrease slightly (by 0.6%) in 2016. It is projected to recover somewhat in the medium term but may struggle to surpass the crop areas grown in 2014. The cereals area, estimated at approximately 2.7 million ha across Scandinavia in 2015 is forecast to decline in 2017, in response to lower prices on global markets. In the UK, the 2016 cereals area is forecast to increase slightly but is also projected to decline in 2017.

For 2016, the oilseed rape area in Scandinavia is forecast to decline by around 9% to approximately 264,000 ha, whilst declines are also forecast in the UK. Protein crop areas are trending upwards, assisted by rotational requirements recently introduced as part of the Common Agricultural Policy (CAP) reform. The maize area, estimated at 200,000 ha across in Scandinavia has increased steadily over the years and is expected to continue to do so, although the rate of increase may not be as large as in the past.

The area of potatoes grown across the region has been relatively stable in recent years, but has been declining slightly long-term. Forecasts indicated that this trend will continue in both the UK and Scandinavia. In terms of other arable, vegetable & horticultural crops, sugar beet has declined across the region in recent years and much will depend on how the sector adapts to the end of the EU quota management system in September 2017. The vegetable and horticultural sector, estimated at around 50,000 ha in Scandinavia and 170,000 ha in the UK is forecast to grow slightly in the coming years.

If you would like further details on crop area estimates and forecasts for Scandinavia or any of the countries examined in this white paper, please do not hesitate to contact us. The Andersons Centre has crop area statistics for each country going back to 2000 and also provides long-term (10-year) annual forecasts for more than 25 crop species as well as grassland and fallow land across the region. Also, if you have other research needs concerning arable and livestock forecasting within Europe, we would be delighted to support you. Below is some further information on The Andersons Centre and its expertise.

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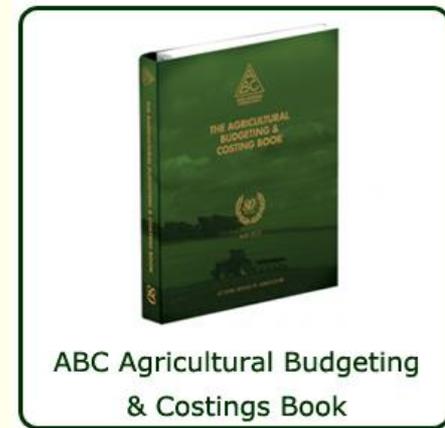
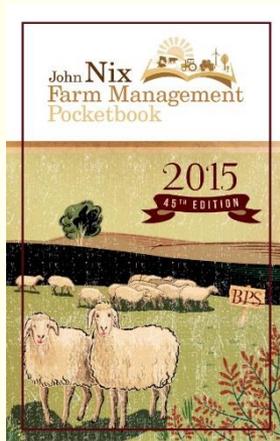
THE ANDERSONS CENTRE

Sectors that we serve

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Other Arable		Other Livestock	

THE ANDERSONS CENTRE

Selected Research Publications



ABC Agricultural Budgeting & Costings Book

AGRI BRIEF BULLETIN **ANDERSONS**
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BULLETIN NO 07
30th July 2015

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- 1. July Budget - Minimum wage and RIT changes 1
- 2. Strengthening Swine4All - Proven - Currency movement hits agriculture 2
- 3. Welsh Agriculture RFI - For sale to 2015 and Infrastructure Finance 2
- 4. English RFI News - EPS 2016, Active Farmer - CAP implications 2
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- 6. Rural England Development - Rural programme open 3
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- 8. Research - University - Consultation and the change case scenario 4
- 9. Other News - Agricultural Britain, Polish milk, French support package, Rural venture funding scheme 4

II. ARABLE

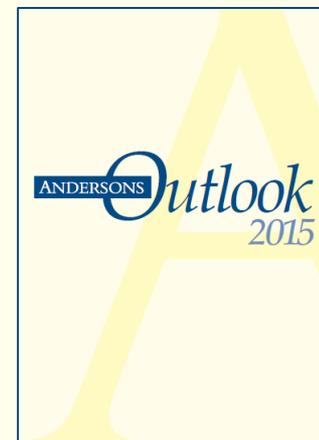
- 1. July Arable Update - Harvest starts, yields look good, prices low 6
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- 3. Cereals and Oilseed - Cereals 7%, drop in bar area for harvest 2015 6
- 4. New Zealand, Emergence U.S. - Good outcome approved for 5% of OSE crop 7
- 5. Other News - Jersey planning, three cereal yields 7

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Minor important items are highlighted in Red

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 - Policy and market development updates (including seminars)
 - Bespoke research
- **Supply Chain and Food Trade**
 - Industry forecasting
 - In-house briefings and seminars
 - Bespoke market and industry analysis

AUTHOR PROFILES

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- Joined in 2004, Partner since 2010.
- Editor of the John Nix Farm Management Pocketbook.
- Covers a wide variety of research for the agri-industry and food supply chain sectors.
- Specialisms:
 - Global grain economics & agricultural competitiveness.
 - Experienced research project leader & market forecaster.
 - Advanced spreadsheet modelling, data handling & analysis.
- Previously worked as an Economist for Banks Cargill Agriculture, a major agricultural merchant, and as a Farm Business Consultant for Laurence Gould Partnership.
- BSc (Hons) Animal Science, Leeds University; MSc Agricultural Management & Economics, Reading University.

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- Joined in 2015.
- 10 years experience in agribusiness & industrial technology.
- Specialisms:
 - Market sizing and market entry strategy.
 - Market intelligence, competitiveness analysis & benchmarking.
 - Business performance analysis and modelling.
- Languages: French (advanced); German (basic).
- Prior to joining, worked as a Senior Analyst with IHS and led several international consulting projects. Previously worked for Syngenta, JFC Manufacturing & European Commission.
- BSc (Hons) Agricultural Economics & Management, Queen's University Belfast; MSc International Agricultural & Food Marketing, Newcastle University.

CONTACT INFORMATION

Thank you for reading this White Paper.

Any questions or comments, please ask.

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