Norfolk Farming in Turbulent Times: Do High Input Systems Still Make Sense?

Norfolk Round Table Discussion 1: Suppliers

Summary - 20 April 2026

Round Table Chair Emily Norton opened the discussion with **leading suppliers** based in the region by highlighting growing pressure across agricultural supply chains, particularly around input costs, profitability, and uncertainty. There was some discussion about the expectation that government support potentially could solve many of these issues, versus the reality that wider economic pressures, especially fuel and energy prices, are driving major changes across farming systems. The session explored both the challenges and where opportunities for adaptation and innovation might lie.

Participants comprised leading suppliers and others from the region including manufacturers of machinery, fertiliser and lubricants, seed breeders, feed businesses, arable and livestock farmers and agricultural advisory consultants, and regional agricultural board representatives.

1. Which input is under the most pressure currently and why?

Different sectors identified different pressures with common themes of energy, uncertainty, labour, and global market volatility.

Main points:

1. **Energy and fuel costs are a major concern across the sector**.
2. **A lubricant manufacturer explained the spike in costs**: a tanker of lubricant base oil had risen from £28k six weeks earlier to £54k, with expectations it could reach £62k the following week. They purchase 7–9 tankers per week and warned of a potential 40% supply shortage over the next 12–24 months.
3. **Feed businesses also highlight rising fuel costs**, with one estimating an additional £950k per year in costs if current prices continue.
4. **Machinery businesses have low confidence in long-term investment**.
5. **Sugar beet machinery manufacturers highlight frustration** with British Sugar offering only 1-year contracts, discouraging investment in expensive harvesters.
6. **Ageing farmers means less appetite for change and risk**. Contractors are ageing, with many now in their late 60s and fewer younger people entering the sector. Farmers are increasingly facing a “low return, high risk” environment.
7. **Labour pressures** remain significant:
   - Seasonal labour shortages continue to affect sowing, harvesting, packing, and food processing.
   - Labour costs have increased sharply due to wage rises and National Insurance changes.

8. **Fertiliser costs and purchasing strategies remain important:**
    - Fertiliser groups note that around 90% of fertiliser for this year has already been purchased, limiting immediate impacts.
    - However, ammonia prices have reached around $930/t, more than double the level of the previous year.
9. **Global commodity markets are affecting confidence. S**ugar prices have fallen sharply despite high oil prices (usually they are linked).
10. **Livestock sectors such as beef and sheep remain relatively confident,** while dairy markets are becoming oversupplied.
11. **Water availability is a significant concern.**

2. What's changed and what's breaking in the UK food system?

The Chair asked: *What has been happening in input supply chains over the last 3 years, and what has changed in the last 3 months? and "Where are high-input systems becoming harder to make work in practice, and what are farmers experiencing on the ground?"*

Participants reflected on how COVID, Brexit, labour shortages and geopolitical instability have reshaped supply chains over the last three years, with recent energy shocks adding further pressure.

Main points:

1. **COVID and Brexit created major disruption.**
2. **Machinery manufacturers face increased certification**, inspection, and cleaning requirements for imports and exports: one manufacturer described paying £450 per inspection, with failed inspections requiring the process to start again. Businesses feel imports into the UK face less scrutiny, creating an uneven playing field.
3. **Energy prices have become a major business risk**. One participant noted that energy costs historically represented around 3% of turnover, but after the Ukraine war this rose to 15–20% for some businesses. In response, businesses invested heavily in energy efficiency. A new £130m cold store near Grantham was cited as using only one-third of the energy of a typical UK facility.
4. **Labour costs have caused financial issues and accelerated investment in automation.** The National Living Wage and National Insurance (NI) changes were described as particularly significant. One machinery company employing around 350 staff estimated that the NI changes alone added £450k to costs almost overnight. Across Lincolnshire, agri-food businesses have invested heavily in robotics and automation, with some reducing labour requirements to around 40% of previous levels.
5. **Supply chains have become more fragile and volatile:**
    - **Lubricant suppliers** describe severe shortages and limited supply growth.
    - **Feed businesses** report amino acid shipments from China doubling in price from £1,000/t to £2,000/t after shipping disruption; prices will be passed on
    - Steel prices rose sharply in COVID, stabilised briefly, and are now rising again.
6. **Technology adoption remains inconsistent.** One participant noted that only around 17% of farmers with new technologies use them effectively. Many still rely on "belt and braces" approaches, applying extra fertiliser "just in case."

7. **Collaboration and data sharing provide opportunities.** One farmer describes sharing cost and performance data with three neighbouring farms. Many farmers don't collaborate at all. A Dutch example highlighted the scale of collaboration possible within agriculture: since the 1980s, around 250 tomato growers have openly shared detailed technical and financial data with one another. Their focus was not on competing farm-to-farm, but on improving efficiency and competitiveness against the rest of the world.

3. Looking ahead to the next five years: where is the most promising progress in using inputs more effectively or differently?

The discussion focused on improving efficiency, reducing waste, and supporting farmers to make better use of technology and knowledge.

Main points:

1. **Precision agriculture and automation are major opportunities**. AI sprayers that can spot-spray weeds were highlighted as examples of reducing input use.
2. **Businesses stressed the importance of proving the financial return for technology investment**; but **education and support was essential both pre- and post-investment** to ensure use and uptake of these technologies.
3. **Energy efficiency and sustainability will continue to drive investment.**
4. **Lubricant manufacturers claimed that using the correct lubricants could improve fuel efficiency by 8–10%.** Their factories had already reduced gas usage by 93% by switching to ultrasound technology.
5. **Businesses are continuing to invest in energy efficiency:** LED lighting, solar power, and more energy-efficient facilities.
6. **Soil management and farming systems were repeatedly identified as the biggest opportunity** with one farmer arguing that improvements would come from "the ground" rather than "the bottle". He explained that wheat yields could vary from 6t/ha to 12t/ha within the same farm depending on soil management, drainage, cultivation, and rotations.
7. **Fertiliser efficiency remains a key focus.** Around 30% of applied nitrogen is lost immediately, representing a major inefficiency. Fertiliser use in the UK is reportedly reducing by around 6% year-on-year.
8. **Plant Breeding and genetics continue to offer long-term potential**. Seed breeders highlighted the role of AI, automation, and precision breeding. Breeding programmes still typically take 10–15 years, although gene editing may reduce this by 2–3 years.
9. **Anaerobic digestion and biogas systems are potentially major opportunities**. One investment group reportedly has £1.4bn available for AD developments. Participant suggested the UK could theoretically produce all its fertiliser requirements through these systems while also reducing carbon emissions.
10. **Knowledge transfer and collaboration are essential**. Dutch, Irish, and Northern Irish farmer networks are much stronger examples of long-term collaboration than those currently operating in England.
11. **Technological improvements and investments require ongoing support** to ensure successful adoption.

4. Will high-input systems still make sense in Norfolk in 5 years?

Most participants agreed that high inputs will retain importance, but that inputs must be used much more efficiently and supported by better knowledge and collaboration.

Main points:

1. **Better use of technology, data, and management will determine whether high-input systems remain viable**.
2. **Efficiency gains are more important** than simply reducing inputs.
3. **Farmers currently carry too much risk** compared with processors and retailers.
4. **Examples were given of supermarkets beginning to offer longer-term agreements**, including M&S 5-year contracts; Sainsbury's £5m investment into longer-term farming relationships.
5. **UK farming continues to face higher costs than many international competitors** while competing in global commodity markets.
6. **Education, technical support, and farmer collaboration were repeatedly identified as essential for future resilience.**

Overall, despite significant pressures, the discussion was cautiously optimistic. Many participants felt **agriculture can remain competitive if the sector continues to improve efficiency, adopt technology more effectively, and strengthen collaboration** across the supply chain.

Acknowledgements

The Round Tables are hosted by the **Royal Norfolk Agricultural Association** and provide valuable insight and discussion that help shape the eponymous annual **Big Debate**, which will take place at the **Royal Norfolk Show** on **Thursday 25 June 2026**.

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