

TRUE EFFICIENCY AND SCALE OF ECONOMY WITHIN CENTRAL AND EASTERN EUROPE

“UK farming could benefit from better co-operation between producers and through better organisation on farms”, reports Worshipful Farmers Charitable Trust beneficiary, Roger Clarke.

Since joining the European Union (EU) in 2004 Polish agriculture has experienced rapid changes, in both the way in which farms are managed and produce is marketed throughout Europe and indeed the rest of the world. The way in which large progressive businesses are being managed is enabling rapid growth through maximising efficiency. How could this expansion of Polish agriculture effect UK producers, if at all?

Eighty percent of food is produced by 20% of farms in Poland; these figures can be seen as a true indicator of the potential for continued growth. As UK producers what can we learn from the management of such businesses and what does the future hold for UK farmers now that central and Eastern Europe are significant contributors to the European agricultural economy?

The purpose of the Worshipful Farmers Charitable Trust bursary was to investigate the comparative sustainability (in terms of economic, social and environmental factors) of large and small scale enterprises in Poland and identify what lessons can be learnt for dealing with change on UK farms.

There is a divide between large scale 1-2,000ha units increasing to 5-7,000 ha and smaller family run farms averaging 4 to 5ha in size. Current trends /show potential for Polish agriculture to continue growing in size and for increased production both in terms of quality and quantity. Since joining the EU both education and agriculture have benefited from substantial financial support from Brussels (European Commission for Agriculture).

Before discussing the sustainability and the efficiency of these larger scale units and identifying what can be learnt, it is important to understand how agriculture is changing in Poland. Table 1, illustrates that the amount of land and the number of people employed in agriculture are both reducing due to development of existing infrastructure, especially new roads and also increased mechanisation. The changing relationship between privately owned land and rented land can be seen in Table 2; the government sold off areas of land even before they joined the EU in 2004 encouraging producers to take ownership and expand their businesses.

Table 1: Land Area and People Employed in Agriculture

LAND AREA/ EMPLOYED PEOPLE	1990	2000	2003	2008	2009	2010
Total agricultural land (million ha)	18.8	17.8	16.2	16.1	16.1	16.1
% of the population employed in agriculture	25.6	26.2	16.5	14.0	13.3	12.9

Source: Prof. Dr Hab Edward Majewski Warsaw Agricultural University June 2013

Table 2: State or Private Ownership

	1990	1995	2000	2002	2004	2010
% land privately owned	75.8	92.3	94	94.5	95.5	96.3
% land state owned	24.2	7.7	6	5.5	4.5	3.7

Source: Prof. Dr Hab Edward Majewski Warsaw Agricultural University June 2013

The statistics presented in Table 3, suggest there are in the region of 2 million farms registered in the country. Since only 50% of total agricultural land is currently run commercially, the potential for

growth and development is likely to continue consequently improving the social way of living and encouraging economic security

Table 3: Distribution of Farms Registered in Poland by Type (2013?)

Farm Type	Number of Farms (millions)
Commercial businesses	1.0
Small to medium scale	0.5
Not in production- average area 1 ha	0.5
Total	2.0

The majority of small family farms tend to be more self-sufficient than larger units. That said the Polish government is beginning to provide training and support to encourage collaboration through the sharing of machinery, labour, crop storage facilities and experience in an attempt to reduce both variable and fixed costs. Co-operatives are already proving popular within the horticultural sector in Poland increasing income through better marketing and increasing economy of scale for the smaller farms and it is thought that this has set a precedent for agriculture to now follow. Producer groups seek increased income through pooling their resources and selling larger quantities of their products in a successful attempt to secure the maximum prices possible.

In the south of the country it is estimated that 57% of farms are below 5ha in size. At the other end of the scale Poland has some very large farming businesses. I visited several of these large scale units, some well over 10,000ha in size. These businesses are clearly very sustainable in the current climate and I would suggest that they will continue to thrive for the following reasons:

- Good management structure is in place from the top down
- Emphasis on quality products – reflecting high husbandry and welfare standards
- Forward thinking, progressive managers
- Open minded teams of managers looking for positive and new ideas
- Businesses investing and creating robust on farm infrastructure to enable long term sustainability, through development and expansion, for example grain storage, reservoirs for irrigation, investment in dairy housing and parlours etc.
- Specialist managers are employed for each area of operation i.e. combinable, dairy, forage production or root crops such as sugarbeet and potatoes
- Clear direction for all staff at all levels with constant on/ off the job training/professional development opportunities
- Working conditions are generally excellent with modern well maintained machines and equipment
- A feeling of ownership and involvement by all staff at all levels
- A high level of accuracy and understanding of forward budgets and costing's
- Young teams of managers, highly motivated and well educated (to degree level)

- Relatively low land rent linked to wheat prices
- A happy/content work force valued by the managers

Knowing your markets now and in the future is vital for all farming businesses. The processors are held in high regard notably due to their passion to meet quality requirements. In Poland soil is generally deep and of a high grade. During my visit I observed fields as big as 200ha allowing for yet more efficiency to be gained and the use of new technology is embraced on these farms, GPS is widely used.

An Example of Future Markets is shown as Follows:

- The potential market of treated cereal seed for planting is estimated to be 1,000,000t
- Current market; 120,000t of seed currently treated per annum
- Only 10% of Polish farms use treated seed, this is predicted to change as older farming generations cease to farm or become better educated about the benefits of drilling treated certified varieties. The remaining 90% of Polish farmers use their own seed at the moment, which are less disease tolerant, results in lower yields and also a potentially reduced grain quality.

Farm employees average 55 years of age and although training is in place to allow them to keep up with new technology, this increasing average age is not sustainable for the long term viability of the Polish agricultural workforce. In Poland labour is very cheap, over 50% less than UK wages in comparison. However, 60 cows per person are acceptable in Poland as compared to 150 cows per person in the UK. I visited five universities and education is taught to a very high standard with Brussels again investing millions of pounds on educational facilities throughout the country. Students I met were in my opinion over educated in the classroom with vocational education relatively uncommon. Within the UK and at Duchy College in particular we focus on real employability skills and hands on experience alongside the required technical knowledge required. If not addressed, this lack of practical training on Polish farms will create a future problem for Polish agriculture.

Since embarking on my trip to Poland, Duchy College have gone into partnership with Spearhead International Ltd and developed the `Spearhead Academy`. This is a two year training programme comprising both full time training at Duchy College, as well as gaining practical experience through work based learning (Advanced Apprenticeships) both in the UK and Central Europe. The aim of the Spearhead project is to train and develop a pool of qualified and experienced machinery operators/technicians to work on modern and efficient large scale units in the UK or abroad.

Conclusion

From my two weeks looking at farming systems in Poland and talking to students and University staff across the country there are a number of lessons can be learnt by UK producers in order to drive both efficiency and productivity. Some farmers have already taken note and taken appropriate action, many however, I would suggest have not:

- There needs to be further collaboration with the processors in order to gain a better understanding of each other's businesses and business philosophies to share best practice and mutual respect.
- Increased focus on farm organisation and efficiency.
- Give more ownership to staff; where possible, create specialists with key areas of responsibility on farm.

- Make staff feel valued.
- Continue to train, encourage and educate staff. Talk to your local land based college for more information or register with any of the following to help build up CPD (continual professional development) hours through attending short courses, workshops or e- training. Contact the specialists in your area of interest. BASIS, FACTS, Dairy Pro, PIPR, NRoSO, Farmers Weekly Academy, Duchy College Rural Business School.

For more information on my trip to Poland or to discuss any of the points raised please contact:
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