

EDF Congress 2009: Grasping the opportunities

by Birthe Lassen¹, Friederike Kath², Jean-Francois Verdenal³, Dieter Mirbach⁴ and Gesa Busch¹

¹ EDF STAR Coordination Center, vTI, Braunschweig, Germany

² DLG, Frankfurt, Germany

³ EDF President, Dairy Farmer, France

⁴ EDF Management, DLG, Frankfurt, Germany

From June 23rd to June 26th the annual congress of European Dairy Farmers took place in Cork, Ireland. More than 260 delegates from 21 countries participated - mostly dairy farmers, advisors and scientists from Europe but also a few farmers and scientists from Australia and New Zealand. EDF is a network of leading European dairy farmers to exchange information and knowledge on international level. Each year, members and interested guests meet in different countries in order to learn more about local production systems and to take home new ideas and knowledge to improve their own dairy business. This year participants learned in workshops and lectures about dairy production in grass based systems, simple systems and labour management.

EDF president Jean Francois Verdenal, dairy farmer in France, welcomed delegates and emphasized the importance of communication between dairy farmers from different countries, especially in times of volatile markets. The network of EDF is offering dairy farmers a unique communication platform and is therefore currently of gaining value to all its members. Despite the current fluctuations on the milk markets he is confident that EDF members are “grasping their opportunities” in using their farm’s potential in relation to their farm location, preferences and that they will manage their farm business with success in the future. Successful dairy farmers to his opinion are entrepreneurs who understand the importance of human resources and cost of production management, who are willing and able to use innovations and who have “an eye” for their cows.

EDF results 2009

EDF is driven not only by active communication between EDF members but also by up to date analysis on current dairy issues. Each year EDF farmers are looking as well backwards (EDF Cost of Production Analysis) as forward (EDF Snapshot analysis).

Annual cost of production analysis this year compiled economic data from 256 farms across Europe. Those data are not representative for the different countries, but allow estimations on international competitiveness of the different national EDF groups. Strong price fluctuations influenced EDF farms both on the cost and return side. Looking at different bookkeeping periods (from 2007 to 2009) it revealed, that the differences in average annual milk prices between the different farm groups were not as extreme as expected because the price increase was balanced by the price fall over time. Therefore it was acceptable to calculate one single EDF average for all EDF farms. It showed that total costs slightly exceeded total returns despite high milk prices. On average, full economic costs (excluding milk quota) would have been covered at a milk price of

34.7 ct/kg ECM (Energy corrected milk). The received milk price was slightly above this level (35.5 ct/kg ECM), but taking quota costs (1.6 ct/kg ECM) into account, full cost recovery was not realised. Costs vary a lot between farms. So looking at current low milk prices (25 ct/kg ECM) about 6 % of the EDF farms would have been able to cover full economic costs. At a price of 35 ct/kg ECM 45% of the EDF farms would be beneficial. In view of these figures, Steffi Wille (EDF Scientific Team, Coordination Centre, Germany), presenting EDF CoP figures, assumes that prices will not stay at the current low level, because such a low milk price would force many dairy farmers out of business which in turn would result in less market supply and increasing milk prices.

Analysis also showed, that the national EDF farmers in Ireland for the past years always have been the most successful entrepreneurs. Other EDF groups under currently fluctuating milk prices even lost competitiveness compared to the Irish branch. That could be an indicator that the Irish production system is more resistant to fluctuating prices than other. Therefore paying special attention to the needs and benefits of this system was the major goal of this year's EDF congress.

Current situation in Ireland

19,000 dairy farmers in Ireland sell their milk to about 30 Co-ops/Public limited companies. 80% of the dairy products become exported and make Ireland to the 10th largest exporter for dairy products in the world. The good climate causes grass growth from February until November. It allows on average 285 days of outside grazing so that the cows are just 2 to 3 months a year in a shed. To tap the full potential of the grassland dairy farmers work with seasonal calving. They stop milking in November/December and by the mid of March all cows should have calved. Farmers with autumn calving are mostly only those who produce liquid milk for all year consumption. Seasonal production (> 50% of milk is produced between May and August) and well managed grazing systems provide high feed values and reduce costs because cows are feeding themselves and are spreading their own slurry. This leads (within the Irish EDF group) to an about 6 ct/kg higher entrepreneur's profit compared to other EDF farmers in the 2009 EDF analysis (*figures are not representative but allow rough estimations for EDF farms*). Ireland in the past always won this "battle" on low cost dairy production. But due to a well developing economy and increasing land prices, production costs increased in the last years. So in order to stay competitive other solutions have to be considered.

John Maher (EDF Scientific Partner, Ireland) explained that there are always three ways to improve business: a) reducing costs, b) increasing returns per litre of milk and c) selling more. Since a) is not working as well any longer and the influence of the farmers is not big enough for b) the Irish dairy industry has to "grasp opportunities" and use its full potential to go for option c), producing more milk.

Ireland can use its potential by increasing its productivities. Farmers see a potential plus of 15% of annual milk production. Scientists estimate an increase of even of up to 70%. Production can basically be improved by looking and improving the key indicators:

- Amount of milk solids/ha
- Tons of grass (DM) utilised/ha
- % of the herd calved in six weeks
- Cow breeding index.

Brendan Horan, grass researcher at Teagasc (Ireland) showed that on good dairy farms about 8-9 tons of grass DM/ha are utilised, on average farms cows utilise 6-7 tons (DM/ha) a year, but the goal is 12-13 tons (DM/ha) utilised a year. By that farmers should be able to achieve 1,200 kg of milk solids (fat and protein) per ha. One possibility to use more of the grass is to have an earlier calving (already in January/February instead of March) in order to adjust the demand of the cows for grass better to the grass growth curve.

It is all about grass

One of the key factors is an efficient grass management. That implies:

- getting more grass per ha,
- getting more grass into the cow,
- getting more cows on the grass,
- finally: Getting more milk solids/ha.

Since Irish dairy production is grass based, dairy research is also focusing on grass based systems. That allows deep and well grounded experiments which are done at Teagasc Moorepark, the Dairy Production Research Centre in Fermoy, Co. Cork. Participants of the conference were able to see different tests on stocking rates, grazing height of grass, labour management systems as well on the research farms of Moorepark as on actual dairy farms. Key messages for good grass management to take home were:

- Always know how much feed is on the fields – good management bases on information.
- Adjust the rotation system to daily grass growth and better take one paddock out of rotation (for silage) than letting cows not graze one paddock off completely (grazing down to 4,5 to 3,5 cm).
- Decide on your stocking rate on the grazing platform depending on your risk ability with regards to climate condition (high stocking rates increase grass growth at optimal weather conditions, but cause problems at wet springs like this year because there is not enough grass).
- Follow your rotation with nitrogen in order to improve grass quality and quantity.

- Get your cows out as early as possible, you can save 2.70 €/cow/day the earlier the cows are outside.

In order to have a high utilisation of grass one does not only need a very good grass management but also need to have good and suitable cows. Those cows should be able to produce about 450 kg milk solids, 50% of the herd should calve in 12 days, 90% within 42 days. They should have a good body condition score (BCS) and fitness and high feed conversion efficiency. This cow is not necessarily a pure Holstein Friesian cow.

High grass intake per cow requires the “right” cow

Irish dairy farmers started farming with Holstein Friesian Cows and this is still the basis of most dairy herds. But more and more cross bred cows are milked because of better health, higher milk solids and especially higher fertility and easy calving. The latter is getting more and more important with seasonal calving because the whole system is only working if most of the herd calves within a period of six weeks. Tom Dunne, one of the visited farmers explained “I artificially inseminate every cow once, then we put a bull in the herd and cows not being gestating at the first of May have to leave the herd.” He pointed out that for his farm cross breeding is a great success, his animals are in better condition than before and vet costs decreased a lot. Especially Norwegian Reds are highly fertile and produce more milk solids than Holstein Friesian or New Zealand Friesians. But he also made clear that starting cross breeding means also to spend more time on selecting bulls: “You need a plan when starting cross breeding. The first bull choice is easy, but if you don’t have a concept how to go on afterwards, you are lost”. Milking some cross bred cows in their 7th lactation shows the success for his herd. Also costs cannot be compared to cows staying just for 2.5 lactations. Teagasc Moorepark is also crossing Jersey genetics into the research herd and after three years of cross breeding first success in higher milk solids can be recognized. Jerseys are marginally favoured for cross breeding because of producing smaller calves (easy calving) and high protein values.

Efficient labour management: 150 cows/labour unit

Irish dairy farmers are very labour efficient: their goal is to farm 150 cows/labour unit which would be double than for e.g. in Germany. They focus on very simple systems and especially concentrate on the fact that the whole process can be run by one person. This efficiency is especially needed during spring time when cows are calving. On farms with 300 cows on average 7 cows calve per day. Farmers professionalized the whole process:

- heifers are only inseminated with “small bulls” in order to have easy calving,
- cows are fed in the evening so that they mostly don’t calve during the night,
- calves are taken to single boxes during the next milking,
- calves are kept in single boxes only for 1-3 days and then are moved to groups,
- groups of calves are moved outside as soon as possible (even only being a week old) and are fed milk only once a day,

- cows are put outside as soon as they have calved,
- male calves are sold at two weeks of age, female calves are often reared by other farms and are leaving farms at about 8-10 weeks of age.

In order to optimize milking times, farmers often feed a minimum of concentrates in the milking parlour in order to attract the cows. Ideally cows are leaving the milking parlour and are directly walking back to the fields without waiting. This is of course only possible if they don't have to cross roads. Some farmers, having a bigger share of fields on the other side of the traffic road therefore build tunnels below those roads in order to optimize the cow walking flow. In contradiction to other European countries Irish dairy farmers have big parlours to shorten the milking time. Often using swing over parlours, they try not to milk longer than 1.5 hours per milking time, even though that causes higher investments in the beginning and a long time not using the parlour per day.

One of the six visited farms even changes from two times milking to one time milking after average 100 days of lactation. Gaining free time allows them to operate field work themselves (on contrary most other Irish dairy farmers have it done by contractors) and to spend more time with their families.

Only two months indoor: low costs for buildings

Due to the short time cows are indoor farmers did not spend much money for housing systems in the past. Some farmers even put their heifers on kale during winter months, so that they are outside all year. But new EU-legislations force farmers to have slurry storage for at least 16 weeks per cow because spreading slurry is forbidden from October 15th until January 15th (southern Ireland). Farmers found different solutions: One of the visited farms built a stand-off-pad, filled with stones and on top with wood chips. So slurry and rain can go through the wood chips and through stones and via drainage will be led into a slurry lagoon. Rain helps to wash the pad, wind helps to dry it off. Another farmer built a new barn but instead of collecting the slurry below the barn, he uses a slurry lagoon. So all in all housing systems are still very simple and provide the comfort of efficient working flows during the dry time and calving period. Cow comfort is on a standard level (no cow brushes or anything similar) and costs differ a lot between the different options but are very cheap compared to barns for all-year-round-indoor housing.

“Maximising full farm potential at the farm at lowest cost” means grasping the opportunities to Shane Fitzgerald, an Irish EDF farmer. To his opinion it is important to improve key factors within the farm gate first before trying to solve them outside.

If more milk is produced it also has to be marketed. Ireland is currently exporting 80% of its milk (mainly commodities like butter and milk powder but also high value products like Baileys). Therefore the country is highly exposed to turbulences on the world dairy markets. On the other hand, the country has built up knowledge with regard to world market exports that can be used to market more milk in the future. According to farmers' opinions, however, there are still too many

dairies in Ireland and especially too many people deciding on possible changes. A suggestion by Mike Magan and Michael Murphy representing Irish Dairy Industry, would be to have an outstanding committee analysing the sector and giving suggestions to the dairies because somebody has to take the lead in order to improve the system.

Outlook 2014

Like all the farms visited, the majority of the farmers participating in this year's EDF Snapshot analysis are planning a relatively strong herd size growth in the coming years. Analysis shows that there is – despite the economic crisis – an accelerating trend to increasing herd sizes until 2014. Although Snapshot figures as well as CoP figures are clearly not representative, they do allow an assessment of future entrepreneurial trends in the dairy industry. Especially participating dairy farmers in north-eastern Europe are planning to expand dairy herds so that the distance between average herd sizes seems to be growing even faster. Limiting factors to herd size growth differ between the 17 participating countries, but for the majority of almost 1200 dairy farmers, the availability of land and labour are the key limits, explained Birthe Lassen, Scientific Team, Coordination Centre, Germany. EDF Scientific partners from Belgium, Italy, France and the Netherlands showed how dairy farmers in their countries face land scarcity (Intensifying field production, buying feed stuff and forage, cooperating with other farmers and exporting slurry).

For more information on EDF congress 2009 in Ireland or on EDF results please contact: John Maher (EDF scientific partner at Moorepark Teagasc, Fermoy, Cork, Ireland: john.maher@teagasc.ie), EDF Scientific coordination team (Birthe Lassen, vTI, Braunschweig, Germany, birthe.lassen@vti.bund.de) or EDF Management (Dieter Mirbach, DLG, d.Mirbach@dlg.org). Presentations and speeches will be soon available at www.dairyfarmer.net. For pictures please contact Birthe Lassen.

The next EDF congress in Italy will focus on “Dairy Farming in Mediterranean conditions”. It will take place from June 23rd to June 25th in the area of Piemonte, near Saluzzo, about one hour away from Torino.