

#### 4. Managing farm business

### **EDF SNAPSHOT 2018:**

### **ANIMAL WELFARE IN EUROPEAN DAIRY FARMS – FIRST INSIGHTS**

Tomke Lindena and Dr. Birthe Lassen

Thünen Institute of Farms Economics

Tomke.Lindena@thuenen.de, +49 531 596 5187,

Bundesallee 63 – 38116 Braunschweig (GER)

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1951 words

Applied paper

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#### **Abstract**

*The European Dairy Farmers (EDF) Snapshot 2018 focused on “Animal Welfare” as animal welfare is a daily concern of dairy farmers and is increasingly important to those outside farming. 201 farmers from 16 countries participated in the survey. First descriptive results are presented in this paper. Even though the results are not representative, they offer interesting insights into the farmers’ perception of animal welfare: According to the participating EDF farmers, animal welfare is of high importance throughout the supply chain, but they also see different priorities for animal welfare aspects. Where EDF farmers consider animal health as the most important aspect, society seems to attach great importance to grazing. In addition to legal and dairy processors’ requirements concerning all farmers in the respective countries, half of the EDF farmers join voluntarily at least one additional programme concerning animal welfare. EDF farmers are mainly motivated to implement animal welfare criteria to improve the cows’ welfare and to increase profitability. The EDF Snapshot data provides interesting insights into the status quo of animal welfare in European dairy farms and forms the basis for further research. EDF members use the results to discuss the current situation and to optimise their own farm strategies.*

**Keywords:** Farm animal welfare, Dairy Farming in Europe, Benchmark

## **1 Background: EDF Snapshot**

EDF (European Dairy Farmers) is unique network of farmers, advisors and dairy researchers. They exchange information, ideas and knowledge across national borders to compare structures and economic efficiency of different production systems, mainly inspired by sharing farm business figures. Every year around 320 EDF dairy farmers provide their economic results to be validated, standardised and analysed by the EDF Scientific Team for Analysis and Research (EDF STAR)<sup>1</sup> (EDF, 2018). In addition to the cost of production (CoP) questionnaire, EDF members focus on one specific topic every year. These insights into hot topics and/or future expectations are used to stimulate discussions between members and partners. The survey 2018 (EDF Snapshot) focused on “Animal Welfare” as animal welfare is a daily concern of dairy farmers and is increasingly important to those outside farming (European Commission, 2016). EDF members use the results to discuss the current situation in the countries and to optimise their own farm strategies.

## **2 Material and Methods: Two surveys**

### **First step: Literature research and expert interviews/survey**

Intensive literature research on animal welfare aspects was condensed into a list of 40 relevant animal welfare indicators for dairy production. In order to determine which of these animal welfare aspects are discussed mostly in the different European countries and should therefore be covered in the farmer’s survey, the STARS were interviewed. They evaluated all animal welfare criteria considering three dimensions: discussions a) on farm level, b) at dairy processor level, c) in society/public media. In October 2017, STARS from 13 European countries<sup>2</sup> participated in this STAR-survey. The following animal welfare criteria were identified for the EDF Snapshot: (1) Housing system, (2) Access to pasture, (3) Housing capacity, (4 & 5) Checking for and recording lameness, (6 & 7) Checking for and recording swollen or injured joints, (8) Use of antibiotics, (9) Dry cow therapy, (10) Hormonal fertility treatments and (11) Dehorning of calves.

### **Second step: Farmers survey (EDF Snapshot)**

The developed animal welfare questionnaire (3 pages long) was pre-tested on EDF farms in December 2017. The final survey was performed between January and April 2018.

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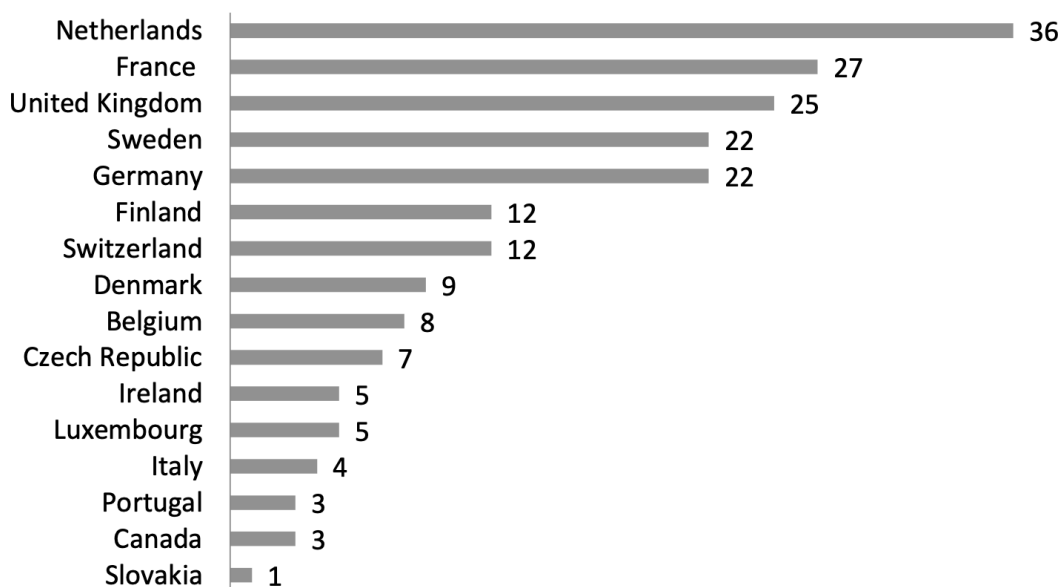
<sup>1</sup> EDF STAR: scientists, advisors and dairy experts from the EDF countries

<sup>2</sup> As Canada is also joining EDF, also one STAR from Canada was interviewed.

STARs in the particular countries were responsible for the execution of the survey: questionnaires have been translated into different languages, have been distributed via the EDF network and have been collected by the STARs in each country. Farmers themselves answered the survey. As the survey was only distributed to EDF members, the following results are not representative for the individual countries or Europe. But they are unique a source for deeper insights into the status quo of animal welfare in European farms.

201 farmers<sup>3</sup> from 16<sup>4</sup> countries participated in the EDF Snapshot 2018. Most of the participating EDF farmers come from the Netherlands, France, the United Kingdom, Sweden and Germany (Fig. 1).

**Fig. 1:** Number of participating farmers in the EDF Snapshot 2018 - by country



Source: Own calculation (2018); not representative

200 participating EDF farmers have reported the size of their dairy herd. These farmers have a total of 49 352 dairy cows. The average participating EDF farmer has 170 cows (referring the median; the mean value is 247 cows), with herd sizes between min. 30 and max. 1 600 dairy cows. Table 1 shows the herd size structure in the sample. Most farms keep 100 to 199 cows. Most cows are in herds between 200 and 399 cows.

<sup>3</sup> Of the 201 farmers surveyed, a total of 13 non-EDF farmers (all from the United Kingdom) participated. For the sake of simplicity, these farmers are included in the following term "participating EDF farmers".

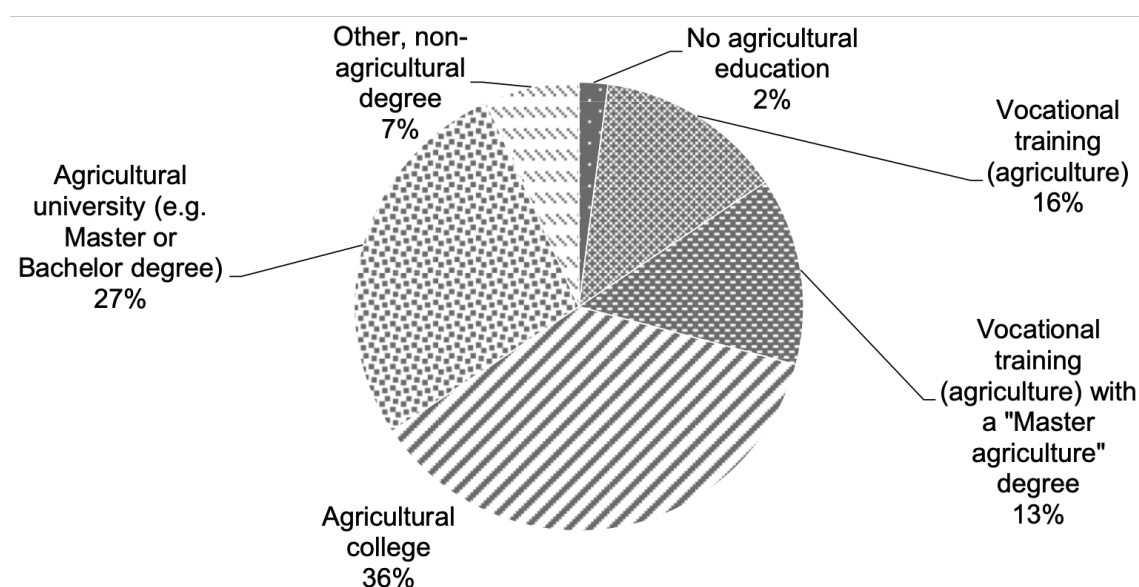
<sup>4</sup> As Canada is also joining EDF, 3 EDF farmers from Canada participated in the Snapshot.

**Tab. 1:** Herd size and herd structure in the participating EDF farms

<b>Herd size</b>	<b>Share of farms ( n = 200 farms)</b>	<b>Share of cows ( n = 49 352 cows)</b>
0 - 99	21 %	6 %
100 - 199	34 %	19 %
200 - 399	30 %	33 %
400 - 999	13 %	29 %
> 1 000	3 %	13 %

Source: Own calculation (2018); not representative

The average participating EDF farmer is 46 years old and the farm owner him-/herself. Figure 2 shows that more than 90 % of the participating EDF farmers have an agricultural education. Higher educational qualifications dominate. More than half of the participating EDF farmers have a college degree or a university degree.

**Fig. 2:** Highest qualification degree of the participating EDF farmers

Source: Own calculation (2018); not representative

The participating EDF farmers deliver their milk to more than 70 dairy processors. The following dairy processors are most frequently supplied: Arla (22 % of participating EDF farmers deliver their milk to Arla), FrieslandCampina (15 %), Valio (6 %), DMK (3 %), Milcobel (3 %), Sodiaal (3 %) and Müller (2 %).

### 3 Results

#### **Animal Welfare of high importance to farmers, society and dairy processors according to the participating EDF farmers**

Animal welfare is of high importance to the participating EDF farmers, averaging a score of 5.3 (1 = not important to 6 = very important). All EDF country groups rated animal welfare as important, with farmers in Finland placing the highest average score at 5.9 (Fig. 3). The participating EDF farmers also considered the topic to be relevant to society (score 5.3) and dairy processors (5.0). According to the participating EDF farmers, in some countries the importance for animal welfare differs between groups (farmer, dairy processor, society, Fig. 3).

#### **Differences in priorities: Farmers and society focus on different aspects of animal welfare**

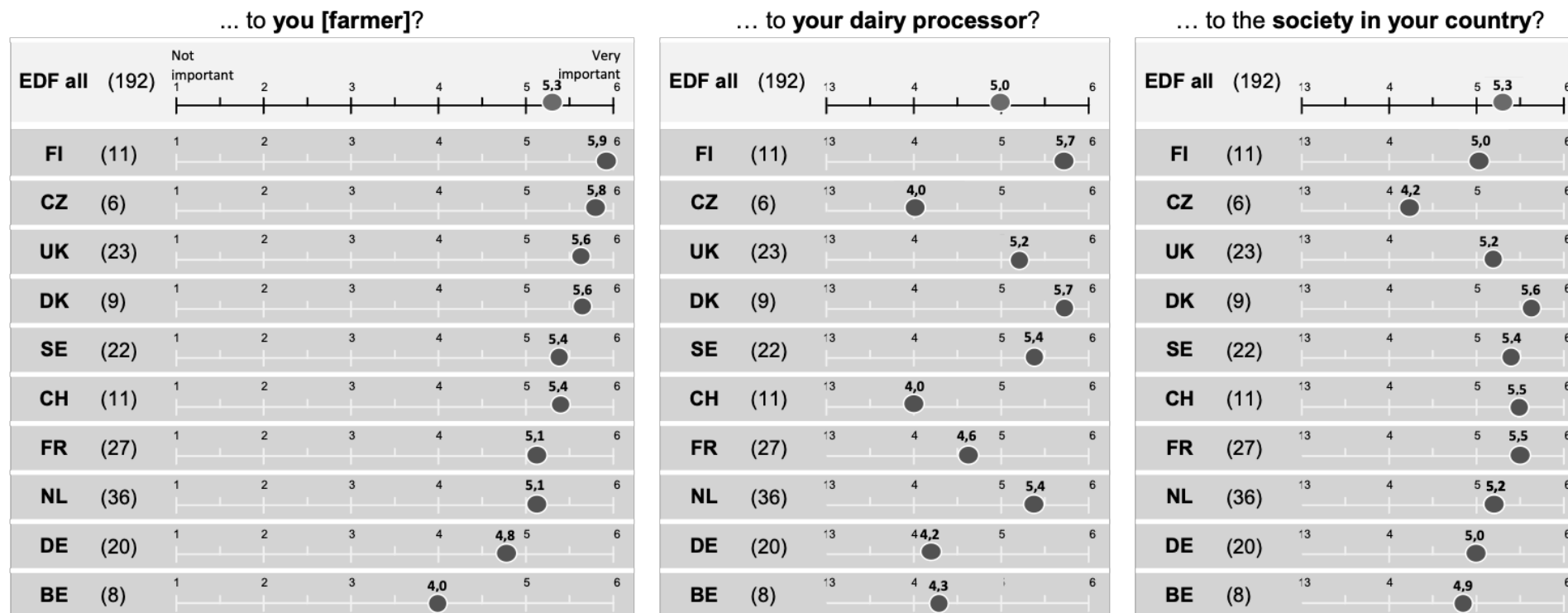
Figure 4 shows the most frequently mentioned aspects of animal welfare which are of high importance to the participating farmers. The larger the scripture the more often the aspect was mentioned. Participating EDF farmers mainly focus on the “five freedoms”<sup>5</sup>. In addition, performance (e.g. milk yield, longevity) is an important animal welfare aspect for participating EDF farmers.

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<sup>5</sup> The five freedoms as currently expressed are: Freedom from hunger or thirst, from discomfort, from pain, injury or disease, to express normal (most) behaviour, from fear and distress (FAWC, 1979).

**Fig. 3:** Average importance of the topic animal welfare according to participating EDF farmers – by country

What do you think: How important is the topic "animal welfare"



Only participants who responded for all groups - farmer, dairy processor, society - are counted and only countries with more than six participants are shown.

Source: Own calculation and illustration (2018); not representative

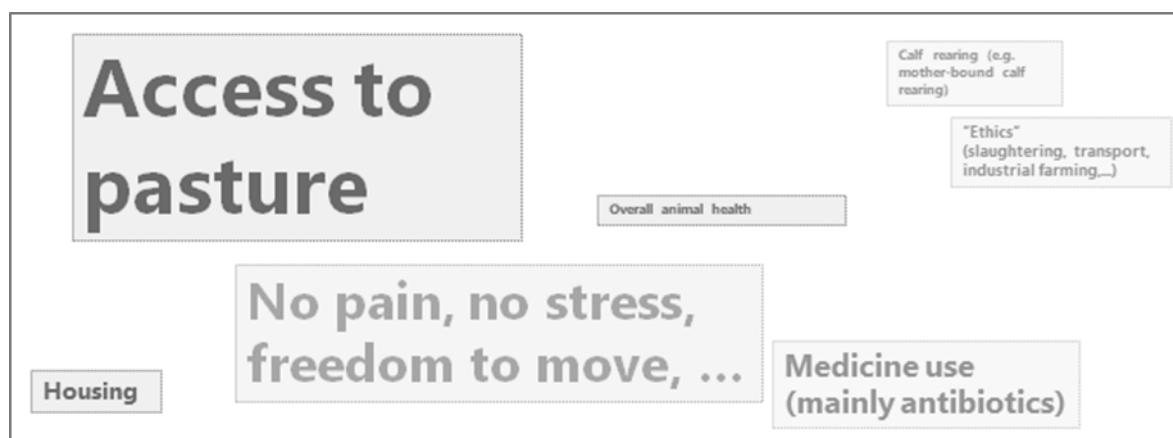
**Fig. 4:** “What do you think: What are the two most important aspects regarding animal welfare?” – Important for farmers



Source: Own calculation and illustration (2018); not representative

Participating EDF farmers consider general aspects of animal welfare also as being of relevance to society but do see different priorities. They see society focusing more on access to pasture, medicine use, aspects related to calf rearing and aspects that can be summarized in the category “ethics” (e.g. slaughtering, transport, industrial farming, Fig. 5).

**Fig. 5:** “What do you think: What are the two most important aspects regarding animal welfare?” – Important for/discussed in the society”



Source: Own calculation and illustration (2018); not representative

### Animal welfare is regulated differently in the EDF countries

Participating EDF-farmers gave information on the regulations for different animal welfare criteria. In total the number of the selected animal welfare criteria prescribed by



law is large in Switzerland, Sweden and in the United Kingdom, medium in Denmark and Finland and poor in Czech Republic, France, Germany and the Netherlands<sup>6</sup>.

### Dairy Processors make their own animal welfare regulations

According to participating EDF farmers, in total around 30 % of the dairy processors have animal welfare regulations for all their farmers. About 17 % of the dairy processors have requirements concerning housing capacity, dehorning of calves, reducing the use of antibiotics and checking for lameness. Less often prescribed is grazing (Tab. 2).

The number of selected animal welfare criteria prescribed by the dairy processor for all farmers is stated to be large for: Arla (DE, DK, SE, UK), FrieslandCampina (NL) and Müller (UK), medium for Valio (FI), Milcobel (BE) and Sodial (FR) and poor for DMK (DE). Furthermore, one fifth of the dairy processors prescribe GMO-free-feeding for all their farmers<sup>7</sup>.

**Tab. 2:** Number of dairy processors which prescribe selected criteria for all farmers - according to information from participating EDF farmers

Animal Welfare criteria specified in the Snapshot questionnaire		From the about 70 dairy processors to which the participating farmers deliver their milk, ... require compliance with the criterion.
<b>Housing capacity:</b> one resting spot per cow		13
<b>Dehorning of calves:</b> pain-relieving treatment		13
<b>Reducing the use of antibiotics</b>		12
<b>Checking for lameness</b> (cow individual basis)		11
<b>Housing system:</b> loose house straw yards or cubicles (no tie-stall)		9
<b>Selective dry cow therapy</b>		8
<b>Hormonal fertility treatments</b> - only used for health reasons		8
<b>Recording lameness</b> (cow individual basis)		7
<b>Checking for swollen or injured joints</b> (cow individual basis)		7
<b>Access to pasture for</b>	- lactating cows	7
	- dry cows	5
	- young stock	5
<b>Recording swollen or injured joints</b> (cow individual basis)		5

Source: Own calculation (2018); not representative

<sup>6</sup> Only countries with more than six participants are listed.

<sup>7</sup> GMO free feeding is not an animal welfare criteria, but has nevertheless been included in the Snapshot due to current discussions in the dairy industry.

In addition to legal and dairy processors requirements for all the farmers, half of the participating EDF farmers join voluntarily at least one additional programme with a dairy processor or others concerning animal welfare. These programmes either address animal welfare (aspects) only, such as BTS (besonders tiergerechte Haltung, engl.: particularly animal-friendly housing systems) in Switzerland or animal welfare is included in dairy sustainability programmes (e.g. Arlagården® by Arla, Foqus Planet by FrieslandCampina, Milkmaster by DMK) and also some quality assurance systems (e.g. BoardBia in Ireland, QM-Milch in Germany, RedTractor in the UK) address single animal welfare aspects.

### **Motivated by cow's well-being and profitability**

Participating EDF-farmers are motivated to implement animal welfare criteria by improved cow's well-being and increased profitability. For example 93 % of all participating farmers check/score their herd for mobility/lameness on a regular basis, mainly to improve the cow's well-being and to increase profitability; 95 % of participating EDF farmers keep their cows in loose housed straw yards or cubicles (no tie-stall) for the aforementioned reasons. The participating EDF farmers also explain that social acceptance plays a motivating role in fulfilling animal welfare aspects - especially when it comes to access to pasture or the reduction of the use of antibiotics - but they attach less importance to this aspect than to the two previously mentioned factors.

### **How will demands on animal welfare develop in future?**

Five years ahead, according to participating EDF-farmers, animal welfare will focus more on access to pasture, medicine use (mainly antibiotics), overall animal health, housing, more space and other aspects related to the five freedoms (Fig. 6). These topics will probably not all be relevant for each individual farmer, but dairy farmers should be ready to discuss these topics with interested parties.

**Fig. 6:** Most important future aspects regarding animal welfare for the participating EDF farmers



Source: Own calculation and illustration (2018); not representative

## 5 Conclusions

201 farmers from 16 countries participated in a survey on animal welfare, conducted by the European Dairy Farmers (EDF) and the Thünen Institute in 2018 (EDF Snapshot). First descriptive results of this unique data set are presented in this paper. The results show the importance of animal welfare throughout the supply chain. They also show why farmers are motivated to implement animal welfare aspects on the farm: to improve cow welfare and the economic performance of the farm. Even though the results are not representative, they offer interesting insights in the farmers' perception of animal welfare aspects. They also allow to address further research questions as for example to analyse differences regarding animal welfare between countries, to identify relations between animal welfare and herd sizes or to combine the data set with economic figures (CoP-data).

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