EuroTier 2021:
Farming in the food chain – Zukunftsperspektiven für die Branche in stürmischen Zeiten

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Economic Environment
Strong decline of pork prices hit pig farmers

- Crop prices higher but due to partly drought in 2020
- Dairy products in case of world economic developments decreased
- Meat – especially pork is influenced by corona (Production difficulties Slaughterhouses)

World wheat production is expanding, also stocks are rising. Also, trade is increasing so stocks in major export nations suggested to decrease against rising stocks seen in global stocks.
Pig production

World pig prices:
• Increasing pig prices in the US, BR and CAN due to growing exports after stop of German exports to China
• In Germany sharp price decline after export stop to China from 1,6 €/kg to 1,19 €/kg

Feed prices:
• Increasing prices for feed grain due to small grain harvest in EU, Russia and the Ukraine and strongly increasing imports of China
• demand of soybeans rises, also exports with lowering stocks at major exporters
• but production under insecurity (La Nina - drought)
Milk market

- EU-milk deliveries 1.9% above last year's level and seasonal declining
- Increasing productivity of farms

- Milk price: lowest price level since 2018
- Dairy farmers under liquidity pressure
- Insecurity for further market prices
Global meat production: Strong increase since last 50 years, but actually risks on demand as a result of Covid-19 recession

- Global livestock sector marked by strong increase of meat production
- Driver of production grow are Asia, South America and the US
- Risks for further development due to decreasing incomes as a consequence of Covid-19 caused recession

Source: our world in data, 13.11.2020
Covid-19 crisis management: Strategic re-orientation, internal reorganization and new communication channels

• Diversification of product portfolio most important approach to manage impacts of Covid-19 crisis
• Even bigger companies plan to use digital platforms as business instrument
• For bigger companies, international markets remain base for doing business

Source: UNIDO, ITPO, DLG, Smart Hectar Impact of Covid-19, 2020
CORE QUESTIONS

1. What impact do the market environment and the investment conditions have on the business climate and business expectations of farmers?

2. Do the farmers want to invest?

3. What innovations are important for livestock farmers to meet challenges?
DLG Short Study 2020 – Business Indication by DLG members
Assessment of business situation and development
Current business situation

- DLG members with their own farm -> differentiated assessment of the economic situation
- Arable farming with a positive view of the situation
- Outlook of Pig farms currently under weak conditions
- Cow farms show liquidity problems
Current business situation

- Differentiated picture in the sectors
- Pig farms especially affected
- Slaughterhouses due to pandemic only partial production of pig slaughter
- Corona restrictions (restaurants, hotels, trade) affect sales of animal products
- Arable farming Farms particularly affected by regional drought
Influencing factors of further development differentiated (I)

- Access to capital remains possible -> sign of confidence
- Dairy farmers have been exposed to strong volatility for years (e.g. low prices 2015)
- Labour demand and wages in livestock farming as a serious problem
- Price pressure and the associated volatilities stress farmers
Generational change seems largely assured.

Increasing environmental protection measures influence / require further development.

High influence of external factors of politics and society.

Competition for land for pig farmers seems more pronounced than for dairy farmers.
Farmer’s strategies to create business development

- Improvement of the earnings-cost structure with high potential (optimisation of unit costs)
- The aim is to develop innovative business areas and types of production
- Importance of a trade fair as a showroom for innovations remains very high
- Expansion currently rather not an issue
Readiness to invest
Replacement investments - main area of farmer’s investment intentions

- Arable farmers want to reduce the investment backlog caused by years of drought
- Expansion and new investments with over 25% in the forecast
- Dairy and pig farmers rather reserved due to liquidity and focus on core investments
- Pig farmers partly very specialized without own feed production (compound feed)
High investment levels in animal farming; arable farmers reluctant

- High willingness to invest in the livestock sector (-> innovations at the EUROTIER)
- High proportion of expansion plans for dairy cattle
- Presumption → Dairy farms have already invested in recent years and have survived existential (price) crises → now trying to generate economies of scale
- Pig farmers plan mainly in replacement investments to solve current challenges
Renewable energies with a perspective, new investments in focus

• Potential for renewable energy more in the livestock sector (dairy 38% and pig farms with 44%)

• Stables can make good use of their own electricity and heat in the production process

• In terms of climate targets, these technologies will probably come back into focus
Innovation trends in Agriculture
INNOVATIONS IN AUTOMATION AND LABOUR COSTS FOR DAIRY FARMERS (I)

<table>
<thead>
<tr>
<th>Innovation</th>
<th>Consulting/Science</th>
<th>Industry/Trade</th>
<th>DLG Member with Dairy Farm</th>
</tr>
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<tbody>
<tr>
<td>Cow comfort by rubber coverings on treads</td>
<td>2.35</td>
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<td>1.90</td>
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<tr>
<td>Autom. cleaning of gaps or walking surfaces</td>
<td>2.07</td>
<td>2.18</td>
<td>2.34</td>
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<td>Autom. milking</td>
<td>1.94</td>
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<tr>
<td>Autom. feed positioning</td>
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<td>Autom. feed template</td>
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<td>Autom. Strewing</td>
<td>2.48</td>
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</table>

N = 164 DLG member with dairy farm
N = 63 DLG member of industry/trade
N = 55 DLG member of consulting/science

- Automation as a substitute for hard-to-find specialist personnel in the focus of DLG members
- Automatic milking and feed positioning still an interesting topic
- Feed template shows wide spread between the groups
- Cow comfort increased in the interest of international dairy farmers
- Automatic strewing not with high priority
Innovations in automation and labour costs for dairy farmers (II)

- Sensor innovations in the dairy stable or animal as innovative technologies
- Animal health is also a trend in innovation
- Cow comfort in the box considered more important than real-time cow location
- Study shows different relevance for the topics (e.g. box bedding)
Innovations in animal welfare and efficiency for pig farmers (I)

- Regional legislation influences the interest in innovations (political guidelines, marketing requirements, etc.)
- Focus on animal welfare and farming systems
- Nutrient-adapted feeding and stable climate as another innovation trend in pig farming
- Outdoor areas perhaps in the view of consulting / science and the industry
Innovations in animal welfare and efficiency for pig farmers (II)

- Systems for efficiency of major importance
- Digitalisation in the pig stable to monitor functions and efficiency in the innovation focus
- Animal health and reduction of antibiotic use in special focus of DLG members
- Bio hygiene takes on special importance in times of African swine fever
Prioritization of the most important innovations in pig farming

- Stable systems and animal health are top priorities in the investment preference.
- Improvements in the area of direct costs as a further target (feed, energy, etc.)
- Subjects such as public relations, marketing and outdoor activities are more of a secondary issue.
- Knowledge topics can be explored at EUROTIER.

### INVESTMENT PREFERENCE OF PIG FARMS OF DLG MEMBERS UNDER THE CONDITION OF PROFITABILITY/PLANNING RELIABILITY?

<table>
<thead>
<tr>
<th>Category</th>
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<tbody>
<tr>
<td>Animal Farming Technology</td>
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<tr>
<td>Animal Health Management</td>
<td>42</td>
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<tr>
<td>Feeding and feeding technology</td>
<td>33</td>
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<tr>
<td>Stable climate control</td>
<td>31</td>
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<tr>
<td>Renewable energies (solar,…)</td>
<td>27</td>
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<tr>
<td>Marketing</td>
<td>22</td>
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<tr>
<td>Personnel/ skilled workers</td>
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<td>Communication/ public image</td>
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<td>other business sectors</td>
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<td>Breeding lines/genetics</td>
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<td>Technology around the stable</td>
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<td>other answers</td>
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N=143

pig farms of DLG member