→ More than 60% of Poland's total land is taken up by farming

→ 12% of the countries workforce is employed in agriculture

→ Seventh largest producer of beef worldwide in 2013

→ 14.7% of farmers are younger than 35 years

🔍 CASE STUDY

POLISH DAIRY INDUSTRY SELECTION INDEX

BREEDING OBJECTIVES AND TRAIT PRIORITISATION

AbacusBio has recently worked with the Centre for Genetics at the Polish Federation of Cattle Breeders and Dairy Farmers to create an economic selection index. The team of Kat Stachowicz, Peter Amer, Tim Byrne, Cheryl Quinton, Bruno Santos, and Daniel Martin – Collado worked on this index.

This index was customised specifically for the needs and requirements of Polish Dairy Farmers. The Centre for Genetics provides genetic analysis to optimize breeding of dairy cattle in Poland. The centre utilises modern technology to support breeders, organisations, and milk producers, ultimately increasing the efficiency and competitiveness of the industry.

Kat and Tim traveled to Poland to gain fundamental knowledge on the countries production systems, current dairy genetic evaluation program, available data, and the index, which will lay the foundation for promoting the value of new state-of-the-art breeding objectives.

This index corresponded to the challenges in the Polish dairy sector as described by project team member Kat Stachowicz -

In Poland, the current selection index is not based on economic principles but depends on the subjective weighting of traits by breeders and farmers" who also states a selection objective based on economic principles usually offers a validated means of assuring more effective and worthwhile gains during genetic improvements.

The team initially carried out a breeding objective survey for farmers, with the purpose of collating economic data to determine their preferences for various dairy cow attributes.

Following an industry presentation of results, they were able to create the index accounting for systematic differences between farmers across different sub-sectors of the industry. The economic index created was expressed in monetary units, where bulls are ranked based on the expected profitability of their daughters which makes farmers' choices easier.

2017