



Update on M3GE project

Background

M3GE is the acronym for Multi-Breed, Multi-Trait, Multi-Country Genomic Evaluations, a project led by Wageningen University & Research and carried out in collaboration with ICAR, Interbull Centre, AHDB, SRUC, ICBF, ANAPRI, ANABIC, and ANACLI.

The project aims to develop methodologies and models for international multi-breed genomic evaluations, a service that has been strongly requested by the international beef cattle breeding community. The project focuses primarily on feed efficiency and longevity, together with their associated indicator traits.

These evaluations are expected to have a significant impact, particularly for breeds and populations with limited representation and smaller reference populations. In addition, the project may provide the foundation for future Beef-on-Dairy genomic evaluations at an international level.

Work performed and achievements

The project started in March 2024.

During the first year of the project and throughout part of 2025, a comprehensive data call was conducted. Pedigree, performance, and genomic data were received from all participating organizations.

In 2025, the first test evaluation for feed efficiency was completed, and the resulting data and outputs were reviewed by the participating organizations in May 2026.

The remainder of 2026 will be dedicated to conducting additional feed efficiency evaluations, including the incorporation of indicator traits, while work on longevity evaluations will also begin.

In parallel, efforts have been ongoing to develop the evaluation pipeline and infrastructure required to establish these evaluations as a permanent service provided by ICAR and the Interbull Centre by the end of the project. As a by-product of this work, harmonization of variants across existing genomic panels has also been pursued, which will facilitate the integration of genomic information from different sources into the evaluation system.

Results and Impact

By the end of the project, the consortium expects to deliver an international multi-breed genomic beef cattle evaluation service. Integration and impact is particularly important for





International Bull Evaluation Service

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countries and breeds with small reference populations, as the international integration of data can substantially improve the reliability and usability of genomic evaluations. Furthermore, the project is expected to create the basis for future developments in international Beef-on-Dairy evaluations and broader collaborative genomic services across countries and breeds.



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