African Dairy Genetic Gains Program: Innovative private-public partnership for sustainable dairy productivity

Key development challenges
- Inadequate availability of productive and adapted dairy cows for smallholder production systems
- Dairy farmers have limited knowledge and access to technical information enabling them to sustainably improve their dairy cattle productivity
- No national performance recording, hence no long-term genetic improvement program
- Input and market services are insufficient and where available are inefficient.

Livestock-based solutions/ interventions
- Development of national performance recording systems to support sustainable dairy cattle genetic improvement program in Africa.
- Smartly apply digital technology, especially mobile phone and ICT-based systems to collect herd data and deliver timely feedbacks and tailor-made education materials to dairy farmers
- Catalyze farmer-to-farmer benchmarking, hence, promote healthy completion, learning and productivity improvement.
- Leverage phenotypic/pedigree recordings to introduce genomic selection programs, thus hasten genetic gains.

Results and evidence
- >10,250 dairy herds and 6,560 animals registered on the Tanzanian performance recording platform and 3,200 herds and 5,150 animals on the Ethiopian platform
- >10,000 Tanzanian farmers and half of that in Ethiopia are receiving training material via their cell phones
- Genomic tools for crossbred bull certification developed and ready for testing and refining
- Systems for genetic evaluation of crossbred bulls already designed and the first recruitment of young bulls for local artificial insemination (AI) and natural breeding planned for early next year.
- Summaries of herd performance and reports being used to enable farmers make timely and informed decision about their farms
- Support to performance-based AI delivery systems developed and being implemented in Ethiopia and Tanzania.

Multiplier effects
- New partnerships to develop and deliver relevant farmers education materials being forged
- Public-private partnerships and multi-stakeholder engagements aimed at delivering more efficient breeding, other input and market services in place and more are being forged, nationally and internationally.

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