





**ADGG**  
African Dairy Genetic Gains  
*More productive and profitable dairy cows*

NEWS FEEDS      search

PHOTOS

PRESENTATIONS

VIDEOS

[Home](#) | [About ADDG](#) | [Events](#) | [Approach](#) | [Outcomes](#) | [Outputs](#) | [Partners](#) | [Team](#) | [ILRI](#) | [Livestock](#) | [ILRI blogs](#) | [News](#)



ABS / ADGG / ANIMAL BREEDING / BIOSCIENCES / DAIRY / LIVESTOCK CRP / GENETICS / ILRI / LIVESTOCK / POULTRY / RESEARCH / TECHNOLOGY / BIOSCIENCES / DAIRY / CRP37 / GENETICS / ILRI / LIVEGENE / LIVESTOCK / POULTRY

## Platform for African Dairy Genetic Gains

ADGG will: A) Establish performance recording and sampling systems in Tanzania and Ethiopia; B) Use the information and samples to develop systems to select crossbred bulls and cows of superior genetic merit for AI and natural mating; C) Pilot farmer-feedback systems that assist farmers to improve their productivity. The goal is to have working systems based on public-private partnerships that have a clear route to long-term sustainability by the end of the ADGG.

Today, the majority of smallholders only own low-producing indigenous cows, and the few smallholders with improved cows suffer heavy productivity losses due to the practice of continuous upgrading with exotic semen to levels that are beyond what the production systems can optimally support. This practice increases mortality at least 2.7 times and reduces productivity per unit of feed by up to 100%. Also, because there are no local systems in place to effectively and sustainably support continuous selection and use of breeding bulls, especially crossbred bulls, there are losses that occur from backcrossing of crossbred cows to local non-descript and less-productive bulls, often negating the gains from crossbreeding. Table 1 illustrates the low levels of production and potential for better productivity in different smallholder dairy sectors. The smallholder dairy systems in Africa need systems that continuously generate the breeding animals required to reduce and then reverse the productivity losses



ABS / ADGG / ANIMAL BREEDING / BIOSCIENCES / DAIRY / LIVESTOCK CRP / GENETICS / ILRI / LIVESTOCK / POULTRY / RESEARCH / TECHNOLOGY / BIOSCIENCES

## The Problem

Currently, most smallholder dairy farmers in Africa are not extracting optimum benefits and profits from keeping dairy cows, because: a) Farmers do not have access to productive and adapted dairy cow breed types that best suit their production systems. Available evidence indicate that farmers prefer crossbreds between indigenous breeds and commercial exotic dairy breeds, but no systems currently exist for their production or multiplication; b) Farmers lack the information or education and extension/training systems that would enable them to share their needs and constraints and get timely feedback and advice improve the productivity and profitability of the cows they keep; c) No systematic and sustainable breeding or selection takes place. This is because there is no systematic performance and pedigree recording and no genetic



ABS / ADGG / ANIMAL BREEDING / BIOSCIENCES / DAIRY / LIVESTOCK CRP / GENETICS / ILRI / LIVESTOCK / POULTRY / RESEARCH / TECHNOLOGY / BIOSCIENCES / DAIRY / CRP37 / GENETICS / ILRI / LIVEGENE / LIVESTOCK / POULTRY

## Platform for African Dairy Genetic Gains

ADGG will: A) Establish performance recording and sampling systems in Tanzania and Ethiopia; B) Use the information and samples to develop systems to select crossbred bulls and cows of superior genetic merit for AI and natural mating; C) Pilot farmer-feedback systems that assist farmers to improve their productivity. The goal is to have working systems based on public-private partnerships that have a clear route to long-term sustainability by the end of the ADGG.

Today, the majority of smallholders only own low-producing indigenous cows, and the few smallholders with improved cows suffer heavy productivity losses due to the practice of continuous upgrading with exotic semen to levels that are beyond what the production systems can optimally support. This practice increases mortality at least 2.7 times and reduces productivity per unit of feed by up to 100%. Also, because there are no local systems in place to effectively and sustainably support continuous selection and use of breeding bulls, especially crossbred bulls, there are losses that occur from backcrossing of crossbred cows to local non-descript and less-productive bulls, often negating the gains from crossbreeding. Table 1 illustrates the low levels of production and potential for better productivity in different smallholder dairy sectors. The smallholder dairy systems in Africa need systems that continuously generate the breeding animals required to reduce and then reverse the productivity losses



NEWS FEEDS

search

PHOTOS

PRESENTATIONS

VIDEOS

ABS / ADGG / ANIMAL BREEDING / BIOSCIENCES / DAIRY / LIVESTOCK CRP / GENETICS / ILRI / LIVESTOCK / POULTRY / RESEARCH / TECHNOLOGY / BIOSCIENCES

## Introducing ADGG

Today, the majority of smallholders only own low-producing indigenous cows, and the few smallholders with improved cows suffer heavy productivity losses due to the practice of continuous upgrading with exotic semen to levels that are beyond what the production systems can optimally support. This practice increases mortality at least 2.7 times and reduces productivity per unit of feed by up to 100%. Also, because there are no local systems in place to effectively and sustainably support continuous selection and use of breeding bulls, especially crossbred bulls, there are losses that occur from backcrossing of crossbred cows to local non-descript and less-productive bulls, often negating the



BILL & MELINDA GATES foundation

LAND O'LAKES, INC.

Dairy farmers



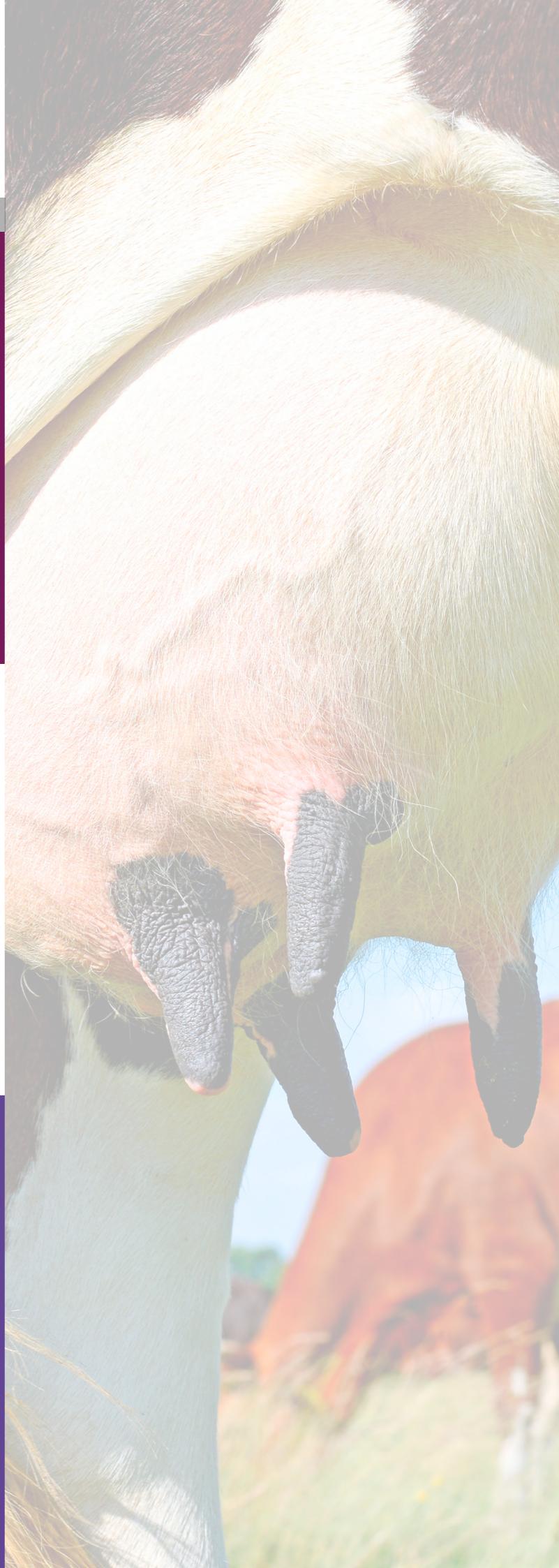
National institutions

In addition to organizations recognized for specific projects and outputs, we thank all donors which globally supported the work of ILRI and its partners through their contributions to the CGIAR system

ABS / ADGG / ANIMAL BREEDING / BIOSCIENCES / DAIRY / LIVESTOCK CRP / GENETICS / ILRI / LIVESTOCK / POULTRY / RESEARCH / TECHNOLOGY / BIOSCIENCES

## The Problem

Currently, most smallholder dairy farmers in Africa are not extracting optimum benefits and profits from keeping dairy cows, because: a) Farmers do not have access to productive and adapted dairy cow breed types that best suit their production systems. Available evidence indicate that farmers prefer crossbreds between indigenous breeds and commercial exotic dairy breeds, but no systems currently exist for their production or multiplication; b) Farmers lack the information or education and extension/training systems that would enable them to share their needs and constraints and get timely feedback and advice improve the productivity and profitability of the cows they keep; c) No systematic and sustainable breeding or selection takes place. This is because there is no systematic performance and pedigree recording and no genetic







**ADGG**  
African Dairy Genetic Gains  
*More productive and profitable dairy cows*

NEWS FEEDS      search

PHOTOS

PRESENTATIONS

VIDEOS

Home | About ADDG | Events | Approach | Outcomes | Outputs | Partners | Team | ILRI | Livestock | ILRI blogs | News



ABS / ADGG / ANIMAL BREEDING / BIOSCIENCES / DAIRY / LIVESTOCK CRP / GENETICS / ILRI / LIVESTOCK / POUMLTRY / RESEARCH / TECHNOLOGY / BIOSCIENCES / DAIRY / CRP37 / GENETICS / ILRI / LIVEGENE / LIVESTOCK / POUMLTRY

## Introducing ADGG

Today, the majority of smallholders only own low-producing indigenous cows, and the few smallholders with improved cows suffer heavy productivity losses due to the practice of continuous upgrading with exotic semen to levels that are beyond what the production systems can optimally support. This practice increases mortality at least 2.7 times and reduces productivity per unit of feed by up to 100%. Also, because there are no local systems in place to effectively and sustainably support continuous selection and use of breeding bulls, especially crossbred bulls, there are losses that occur from backcrossing of crossbred cows to local non-descript and less-productive bulls, often negating the

ABS / ADGG / ANIMAL BREEDING / BIOSCIENCES / DAIRY / LIVESTOCK CRP / GENETICS / ILRI / LIVESTOCK / POUMLTRY / RESEARCH / TECHNOLOGY / BIOSCIENCES / DAIRY / CRP37 / GENETICS / ILRI / LIVEGENE / LIVESTOCK / POUMLTRY

## Platform for African Dairy Genetic Gains

ADGG will: A) Establish performance recording and sampling systems in Tanzania and Ethiopia; B) Use the information and samples to develop systems to select crossbred bulls and cows of superior genetic merit for AI and natural mating; C) Pilot farmer-feedback systems that assist farmers to improve their productivity. The goal is to have working systems based on public-private partnerships that have a clear route to long-term sustainability by the end of the ADGG.

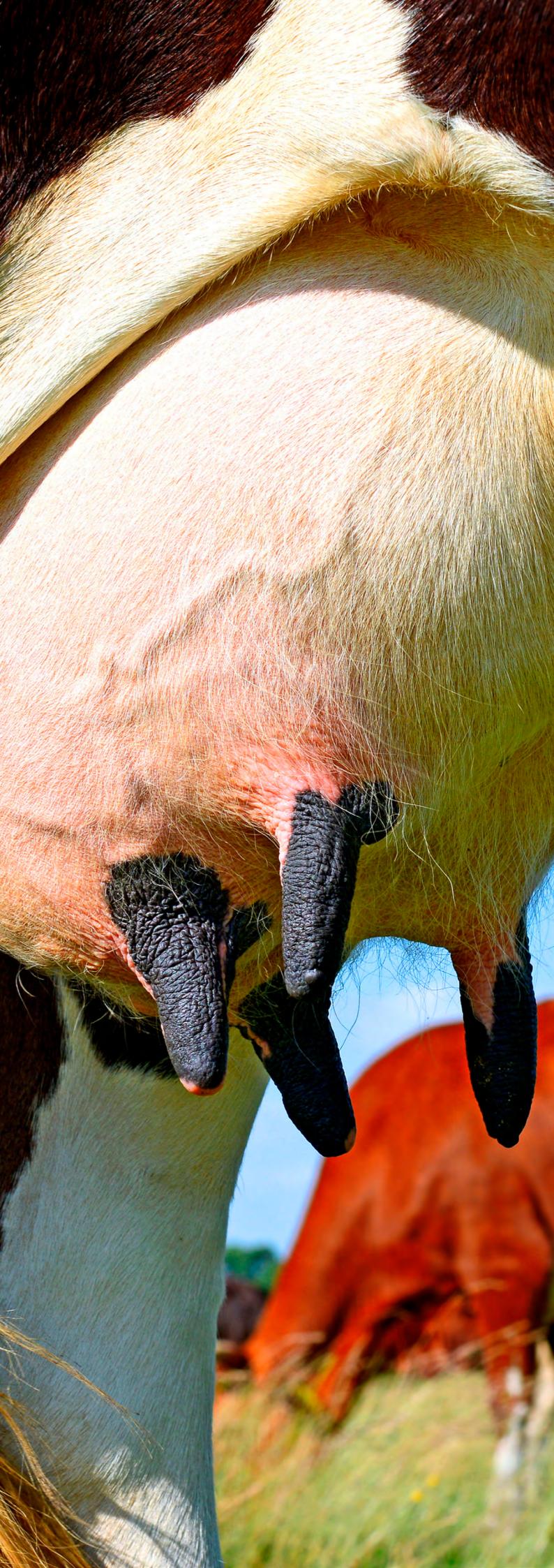
Today, the majority of smallholders only own low-producing indigenous cows, and the few smallholders with improved cows suffer heavy productivity losses due to the practice of continuous upgrading with exotic semen to levels that are beyond what the production systems can optimally support. This practice increases mortality at least 2.7 times and reduces productivity per unit of feed by up to 100%. Also, because there are no local systems in place to effectively and sustainably support continuous selection and use of breeding bulls, especially crossbred bulls, there are losses that occur from backcrossing of crossbred cows to local non-descript and less-productive bulls, often negating the gains from crossbreeding. Table 1 illustrates the low levels of production and potential for better productivity in different smallholder dairy sectors. The smallholder dairy systems in Africa need systems that continuously generate the breeding animals required to reduce and then reverse the productivity losses



ABS / ADGG / ANIMAL BREEDING / BIOSCIENCES / DAIRY / LIVESTOCK CRP / GENETICS / ILRI / LIVESTOCK / POUMLTRY / RESEARCH / TECHNOLOGY / BIOSCIENCES

## The Problem

Currently, most smallholder dairy farmers in Africa are not extracting optimum benefits and profits from keeping dairy cows, because: a) Farmers do not have access to productive and adapted dairy cow breed types that best suit their production systems. Available evidence indicate that farmers prefer crossbreds between indigenous breeds and commercial exotic dairy breeds, but no systems currently exist for their production or multiplication; b) Farmers lack the information or education and extension/training systems that would enable them to share their needs and constraints and get timely feedback and advice improve the productivity and profitability of the cows they keep; c) No systematic and sustainable breeding or selection takes place. This is because there is no systematic performance and pedigree recording and no genetic



**ADGG****African Dairy Genetic Gains**

More productive and profitable dairy cows

[Home](#) | [About ADDG](#) | [Events](#) | [Approach](#) | [Outcomes](#) | [Outputs](#) | [Partners](#) | [Team](#) | [ILRI](#) | [Livestock](#) | [ILRI blogs](#) | [News](#)[NEWS FEEDS](#)

search

[PHOTOS](#)[PRESENTATIONS](#)[VIDEOS](#)

ABS / ADGG / ANIMAL BREEDING / BIOSCIENCES / DAIRY / LIVESTOCK CRP / GENETICS / ILRI / LIVESTOCK / POUMLTRY / RESEARCH / TECHNOLOGY / BIOSCIENCES

## Introducing ADGG

Today, the majority of smallholders only own low-producing indigenous cows, and the few smallholders with improved cows suffer heavy productivity losses due to the practice of continuous upgrading with exotic semen to levels that are beyond what the production systems can optimally support. This practice increases mortality at least 2.7 times and reduces productivity per unit of feed by up to 100%. Also, because there are no local systems in place to effectively and sustainably support continuous selection and use of breeding bulls, especially crossbred bulls, there are losses that occur from backcrossing of crossbred cows to local non-descript and less-productive bulls, often negating the

ABS / ADGG / ANIMAL BREEDING / BIOSCIENCES / DAIRY / LIVESTOCK CRP / GENETICS / ILRI / LIVESTOCK / POUMLTRY / RESEARCH / TECHNOLOGY / BIOSCIENCES / DAIRY / CRP37 / GENETICS / ILRI / LIVEGENE / LIVESTOCK / POUMLTRY

## Platform for African Dairy Genetic Gains

ADGG will: A) Establish performance recording and sampling systems in Tanzania and Ethiopia; B) Use the information and samples to develop systems to select crossbred bulls and cows of superior genetic merit for AI and natural mating; C) Pilot farmer-feedback systems that assist farmers to improve their productivity. The goal is to have working systems based on public-private partnerships that have a clear route to long-term sustainability by the end of the ADGG.

Today, the majority of smallholders only own low-producing indigenous cows, and the few smallholders with improved cows suffer heavy productivity losses due to the practice of continuous upgrading with exotic semen to levels that are beyond what the production systems can optimally support. This practice increases mortality at least 2.7 times and reduces productivity per unit of feed by up to 100%. Also, because there are no local systems in place to effectively and sustainably support continuous selection and use of breeding bulls, especially crossbred bulls, there are losses that occur from backcrossing of crossbred cows to local non-descript and less-productive bulls, often negating the gains from crossbreeding. Table 1 illustrates the low levels of production and potential for better productivity in different smallholder dairy sectors. The smallholder dairy systems in Africa need systems that continuously generate the breeding animals required to reduce and then reverse the productivity losses

[BILL & MELINDA GATES foundation](#)[LAND O'LAKES, INC.](#)

Dairy farmers



National institutions

In addition to organizations recognized for specific projects and outputs, we thank all donors which globally supported the work of ILRI and its partners through their contributions to the CGIAR system

ABS / ADGG / ANIMAL BREEDING / BIOSCIENCES / DAIRY / LIVESTOCK CRP / GENETICS / ILRI / LIVESTOCK / POUMLTRY / RESEARCH / TECHNOLOGY / BIOSCIENCES

## The Problem

Currently, most smallholder dairy farmers in Africa are not extracting optimum benefits and profits from keeping dairy cows, because: a) Farmers do not have access to productive and adapted dairy cow breed types that best suit their production systems. Available evidence indicate that farmers prefer crossbreds between indigenous breeds and commercial exotic dairy breeds, but no systems currently exist for their production or multiplication; b) Farmers lack the information or education and extension/training systems that would enable them to share their needs and constraints and get timely feedback and advice improve the productivity and profitability of the cows they keep; c) No systematic and sustainable breeding or selection takes place. This is because there is no systematic performance and pedigree recording and no genetic

