

ANIMAL IDENTIFICATION , TRACEABILITY AND PERFORMANCE RECORDING IN SOUTH AFRICA



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INTRODUCTION

- Farm animals are one of the most important socio cultural and economic resources in South Africa
- Proof of ownership has progressed over centuries from traditional marks (some are still used to this day) to a central system that allocates a unique owner mark that is then applied by way of a permanent brand or tattoo to each animal
- This only applies to non registered listed animals
- The need to record births and economically important traits led to the introduction of individual animal identification and recording systems for beef cattle, dairy cattle , sheep , goats and pigs .
- With the exception of the seed stock industry, however, very little was done in the commercial sector as far as individual animal identification was concerned

INTRODUCTION (CONTINUED)

This has had a negative impact on the ability to have accurate statistics on the distribution of farm animals the state of health of these animals and the ability to provide guarantees on the origin and well being of animals

Developing a system that combines owner identification , individual animal identification (where needed) and traceability system to provide a range of guarantees has become a major challenge that needs to be resolved to make meaningful progress with the improvement of the production efficiency of the national herd and the development of local, regional and International markets

THE CURRENT STATUS OF ANIMAL ID IN SOUTH AFRICA



Compulsory animal owner identification in terms of the Animal ID Act, 2002(Act No 6 of 2002) applies to all non registered cattle, sheep , goats and pigs in the country
There are currently 666 862 registered marks



Legal individual animal Identification in terms of the Animal Improvement Act, 1998 (Act 62 of 1998)
Registered (stud) animals are marked according to Breed society specifications. This includes brands, tattoos
Microchips and tags .Sometimes a breed mark is also added



Individual animal identification for recording and traceability – this is in addition to an owner mark
In the case of non registered animals, a wide range of ID Methods are used . At this stage they have no legal status



Main advantages of owner identification

Visible deterrent – stock theft

Positive proof of ownership – stock theft ; monitoring at sale yards and abattoirs

More effective policing – stock theft ; strayed animals

More effective recovery rate – stolen and strayed animals

Owner identification for animal recording ; monitoring the movement Of animals (Dip tank ID , etc)

Challenges

Despite the fact that it is compulsory to mark all non registered cattle, sheep, goats and pigs , animals are still being accepted at sale yards and abattoirs without the necessary owner marks

Little to no traceability – the animal can be traced to the owner but the owner may live elsewhere.

No provision for individual animal identification

Possible duplication of marks with registered herd prefixes - Databases for non registered and registered animals are not linked

No country identification mark at present

INDIVIDUAL ANIMAL IDENTIFICATION



Currently limited to registered (stud) animals, animals in recording and evaluation schemes and animals where the owners need a traceability system for marketing purposes

Individual animal ID is only a legal requirement With registered (stud) animals in terms of the Animal improvement Act, 1998 (Act 62 of 1998) . The method of ID is determined by the breed society and includes brands Tags and tattoos

Unique one to three character herd prefixes are issued by the managers of the INTERGIS This is not linked to the owner ID system at this Stage.



Identification of registered (stud animals)



Some breed societies use a combination of Tags, tattoos and brands



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Animal recording in South Africa

Animal recording in South Africa started with milk recording and improvement and progressed to beef cattle, pigs , wool and mutton and pigs over the years.

National animal improvement schemes were registered in terms of the Animal Improvement Act, 1998 (Act 62 of 1998)

The National schemes are currently managed by the ARC Animal Improvement Institute and include a beef cattle scheme , Kanaofatso ya di kgomo for the developing sector.

Individual animal identification makes it possible to record and evaluate animals and to take informed decisions based on reliable genetic information that is becoming more and more accurate with the recent advances in genomics.

This also makes it possible to trace animals and animal products – depending on the information collected in the process

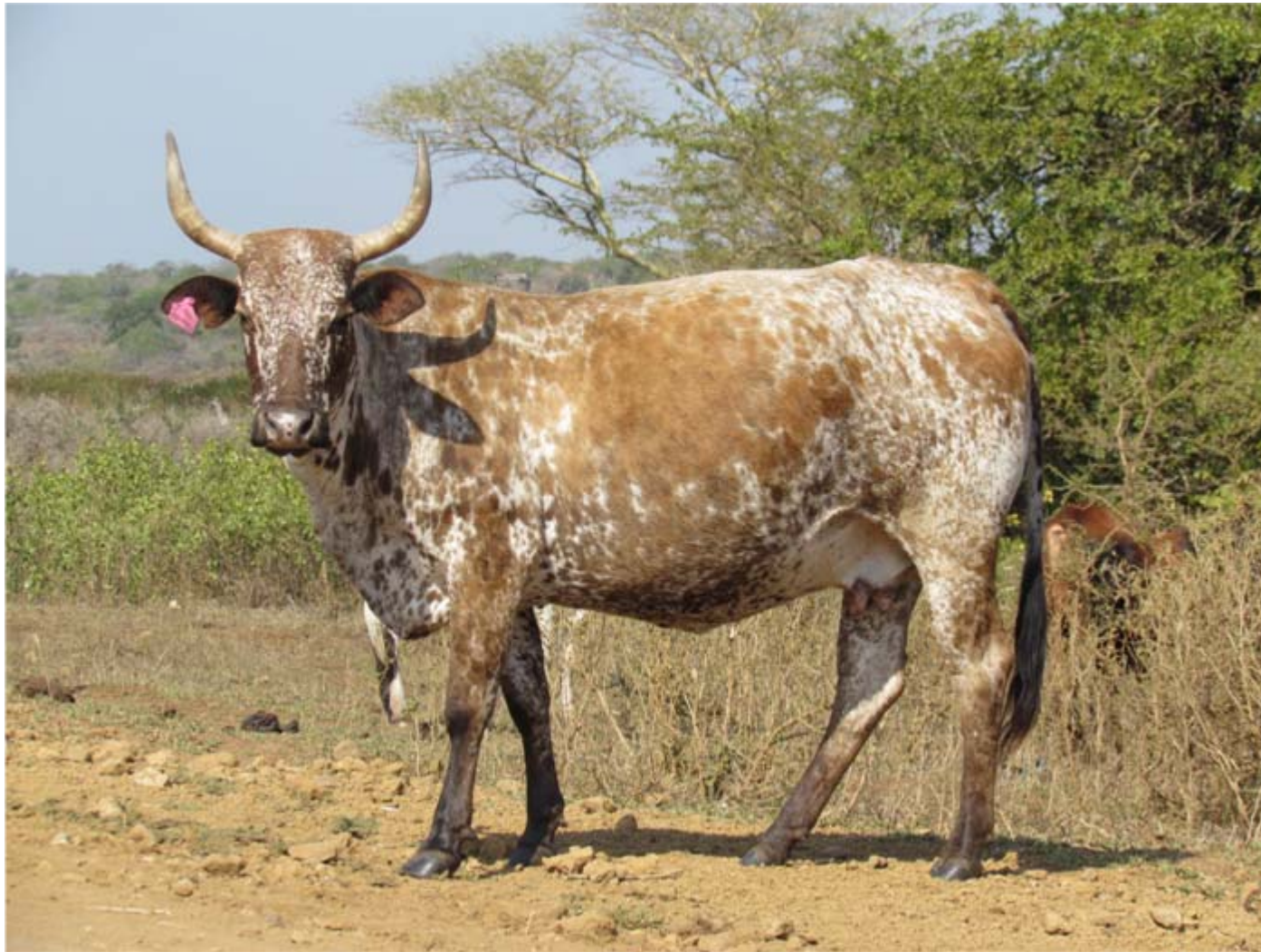
Animal recording

This data is processed and stored on the National Livestock Database, the Integrated Registration and Genetic Information System (INTERGIS) that combines pedigree and performance information to improve farm animal genetic resources in South Africa and to provide guarantees on genetic information such as performance indexes and breeding values of individual animals .

Some independent registering authorities also provide a similar service and the INTERGIS and the other services are also used by some commercial producers as well – largely in the dairy industry that is more dependent on recording and evaluation at this stage

South Africa is the only member of ICAR (International Committee for Animal Recording) in SADC and the third country to join ICAR after Tunisia, and Egypt.

Traceability and disease control and surveillance



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Recently introduced two dimensional bar coded tags for FMD control and surveillance

- ICAR accredited tags
- Country identification
- Unique numbers that cannot be duplicated
- Colour coding – pink , green and yellow
- Manual and digital capture
- Linked to a database that can include information such as the dip tank or owner mark, health status, accurate origin , etc.

This system can be used for full traceability – depending on the data captured

Challenges – one system for animal identification, performance recording and traceability

- Despite the problems with the current owner identification system – a permanent visible mark has massive advantages in the prevention of stock theft and is the most cost effective system for a large percentage of the livestock owners and keepers in the Country
- It currently lacks an official country mark and needs to be linked to the NLDB
- Individual animal identification using accredited tags with unique numbers needs to be phased in – it has started with animals in the FMD control and surveillance areas and could be expanded – possibly starting with cattle in the communal rangeland areas

Challenges – one system for animal identification, performance recording and traceability

- Making this compulsory would require a change in legislation and this is currently being considered in a legislative review process
- Some Provinces are introducing individual animal identification and it is critically important to have uniformity in standards and to have all numbers randomly allocated by one source
- All information will need to be stored on one central databank with links to any other systems to avoid possible duplication
- The NLDB , the INTERGIS could be used for this purpose

Advantages of the National Livestock Databank , INTERGIS

The Agricultural Research Council (ARC) currently manages the INTERGIS - a complete individual animal identification and recording system for all registered stud animals in the country on behalf of the Department of Agriculture, Forestry and Fisheries (DAFF). Records of each animal's growth performance, reproduction, movements and transfer of animals among animal owners are kept on this facility. The system is fully computerised and runs on web-based software

What is needed is a link to the AIDB, to the service issuing unique numbers and to the epidemiology database currently under development

We need to develop a system that has a combination of a visible owner mark along with a tag for individual identification to record births, deaths, herd composition, to monitor health status and the movement of animals and to have full value chain traceability. A country mark should also be added



Thank you
Ndi a livhuwa

