THE *Value* of LOGIX BEEF CATTLE STUD BREEDING

for commercial beef cattle producers

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The traditional "pyramid" showing gene flow from stud breeders to commercial producers' herds is the model that still determines total genetic progress in the national beef cattle industry. The genetic progress for stud animals therefore determines the change in efficiency of production for each beef cattle producer.

It is well known that change in productivity of production animals (including beef cattle) depends on:

- Clearly defined breeding goals and well described selection criteria, based on the available genetic differences (differences in breeding values), the economic value of each characteristic and the effect of selection for any trait of genetic change for any of the other traits that affects production efficiency.
- Selection and culling of animals, based on their genetic merit (breeding values) for the objectives and selection criteria.
- Optimal mating to ensure the maintenance of genetic variation (variation in breeding values) while such offspring is genetically closer to the breeding goals.

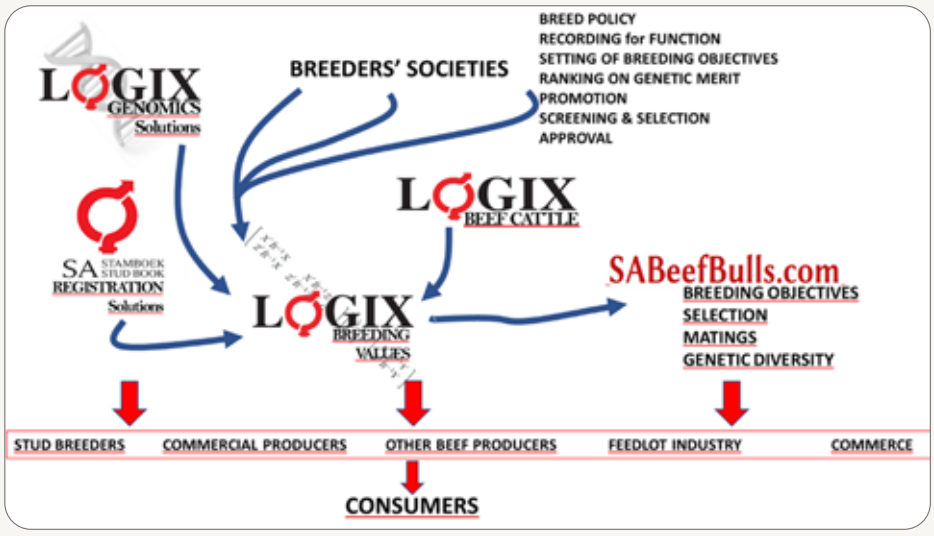
Through www.SABeefBulls.com, commercial meat producers have full access to the results and services offered by Logix. It is possible to pursue own goals and to select female animals for the peace of mind that bulls can be found that fit precisely to own goal and therefore ensure genetic progress in the right direction. SA Studbook's sales catalogues, developed in consultation with Breeders' Societies (adapted to each need), provide quick access to animals at the auction's full genetic and pedigree data. This can easily be done through the so-called Quick Response (QR) codes that are printed on the catalogues.

Pure breeding is the source of successful crossbreeding. Most crossbreeding programs use the initial impact of hybrid vigour (either in the direct progeny with growth and carcass traits and/or second-generation offspring by reproduction and survival of female progeny who are the dams of these offspring) or complementarity (where good qualities of different breeds are combined). These, often complex mating systems (if applied correctly) leave very little opportunity for the selection of genetically-superior replacement animals. Logix for Stud Breeders offers a complete solution to this because the genetic progress in pure-bred animals ensures that crossbreeding will also be more successful for generations to come.

Selection for more efficient beef cattle production is summarized in two **GENETIC** values, namely the **COW VALUE** (compilation of calving ease, pre-weaning growth rate, milk (maternity ability), heifer and cow fertility, herd life and cow maintenance) indicating profit per hectare for breeding stock and their offspring under production conditions and **GROWTH VALUE** indicating profit per animal in a feedlot or similar fattening phase. Genetic trends of breeds that are part of Logix show an improvement in Cow Value of R75 per cow per year and between 1% and 2% improvement in feed efficiency (the main component of Growth Value) under feedlot conditions.

The recent report[1] prepared for the Beef Genomics Program indicates that the return on costs incurred by stud farmers and other institutions for the genetic improvement of stud animals yields a return of 300% for other role-players in the beef cattle industry. The biggest value is for commercial producers who make use of the available technologies and resources such as Logix, SABeefBulls.com and the reports made available for them.

[1] ***Assessing the economic impact of the Beef Genomics Program***. *Report prepared for the Technology Innovation Agency. Nova Economics.*



- Artikel ook in Afrikaans beskikbaar by die kantoor