

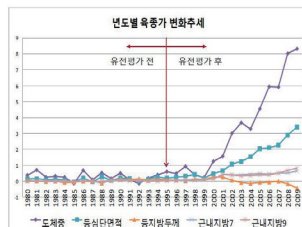
6. Animal Genetic Improvement Research

(1) Nation Wide Genetic Improvement Program

To promote a variety of tasks of national livestock breeding - pedigree information management, performance data collection, examination of candidate animals in test stations, evaluation of carcass grades, production of semen and so on, MFAFF (Ministry of Food, Agriculture, Forestry and Fisheries) assigned an agency responsible for these tasks. The National Institute of Animal Science, as a general agency for genetic improvements in Korea, is responsible for setting up breeding goals and management of breeding organization network.

There has been increased in demand for Hanwoo semen with superior genetic potentials, which raises the need of selection of bulls based on their genetic values with higher accuracy. To meet this consumers' demand, we have begun sales of young bull semen since 2010. We also applied multiple trait models in genetic evaluation of Hanwoo to improve accuracy.

In dairy cattle breeding, we selected domestic Holstein bulls proven by nationwide performance testing program decreasing the domestic market share of imported semen. We also initiated research projects dealing with somatic cell counts and the other longevity traits in dairy cattle. Another on-going international cooperative research project is to develop genetic evaluation models across the country, which might become the basis to open dairy semen export market in the near future.



Effect of genetic evaluation



Korean proven bull

Hanwoo mating plan guide

In 2010, out of performance testing, 81 young bulls and 27 proven bulls of Hanwoo and Hostein were newly selected and engaged into national semen supply chain. The 7th and 8th issues of mating tutorial handbook for Hanwoo, Holstein cows and heifers were published.