Abstract by Seung-Soo Lee - Information system for the profitable semen selection of Hanwoo in Korea

To make a genetic improvement of Korean native beef cattle (Hanwoo), nationwide genetic evaluation is conducted every six months by National Institute of Animal Science (NIAS) in Korea. Each evaluation session selects 10 proven bulls and a total of about 50 proven bulls are maintained all the time. To avoid inbreeding and meet the farmer's own breeding objectives, providing appropriate information of proven bull's semen is required. NIAS provides those information with 4 ways; handbook, stand-alone Excel VBA, web-based database and smart phone application (iOS and Android version). Each system has their own pros and cons and farmers utilize some of them as their circumstances. Information contains identification number of proven bull semen, inbreeding coefficient, expected progeny difference (EPD), slaughter weight, eye muscle area, backfat thickness, intramuscular fat content and 12 month weight. Main characteristics of the system are providing exact inbreeding coefficient and EPD of putative calf at all the possible mating combination using cow's paternal pedigree information. Using this system, breeders and independent artificial insemination technicians can maximize the ability of available semen as the market demand.