



◀ A camel and its rider cross the finish line at a camel-racing competition in Nowshahr-e Kalangi village, Hormozgan Province, southern Iran, on February 26, 2022.
● NADER NASERI/IRNA



◀ People are given a tour on camelback in Iran.
● NINARA

kit — an achievement that was singled out for honor three years ago during Research Week at the Ministry of Agriculture,” he maintained.

He emphasized that to keep this momentum going, the government must, under Article 3 of the National Livestock System, step in to back up and make use of such initiatives supporting genetic conservation.

The associate professor at the Yazd Agricultural and Natural Resources Research and Education Center added that camel meat, valued for its similarity to red meat but with lower cholesterol, has earned a special place among consumers, particularly in desert regions. Given Iran’s arid climate and the camel’s outstanding ability to cope with drought and water scarcity, expanding camel meat production could act as a sustainable and cost-effective solution to meet the country’s protein needs and cut back on red meat imports.

He said the main strategy in camel farming now is to maintain current herds and broaden dairy camel breeding. Since camel meat still barely figures in most people’s diets, the focus has long fallen by the wayside, though dairy production is in far better shape.

Bitaraf Sani stated that Iran’s camels make up roughly 2 percent of the global livestock population, compared with 20 to 25 percent in neighboring Arab countries. Ultimately, given Iran’s desert potential for breeding and free-range pasture capacity, along with the reduced dependency on feed inputs, camel rearing through hand-feeding can play a leading role in expanding livestock production.

He continued that from a quantitative point of view, the camel development strategy must zero in on pasture management. “Conducting rangeland audits, identifying unclaimed pastures, and promoting ecologically sustainable camel breeding based on grazing capacity and supplementary feed-

ing could serve as a solid foundation.” On top of that, he said, before industrial farms and dairy or protein production are developed, marketing, branding, packaging, and processing should be seriously pushed forward “through a non-governmental organization”.

He added that, with growing attention from authorities and untapped potential across the country, scaling up camel meat production could hold the key to self-sufficiency and long-term growth in the livestock sector.

The faculty member believes that, considering desert ecology and advances in breeding science, the development of camel farming could play a major part in ensuring national food security and animal protein supply. “However, this requires continuous government support, technical infrastructure, and attention to cultural and market challenges in Iran,” he concluded.

20 percent of Iran’s deserts ready for expansion

Previously, Nader Asadzadeh, deputy director for Research, Technology, and Findings, Dissemination at the Animal Sciences Research Institute of Iran, told IRNA that more than



Nader Asadzadeh

20 percent of Iran’s landmass is desert, unsuitable for any species other than camels — making them the natural choice. As global desertification gathers pace due to climate change, camel breeding has come under the spotlight worldwide. He noted that most research now comes out of the US and Europe, emphasizing camel applications and importance, while in Iran, the issue has been left on the back burner.

He attributed the decline of camel farming in Iran to growing urbanization and shifts in the animal’s traditional function, despite camels being multi-purpose livestock that lend themselves to the production of food, medicine, and hygiene products using their milk, meat, wool, and hide.

Asadzadeh noted that Iran’s one-humped native camels — Turkmen, Baluchi, Zahedi, Kalkouyi, and Mahabadi breeds — are suited to both meat and milk production, while the

two-humped species are mainly found in the Caucasus and Azerbaijan.

He went on to say that the Animal Sciences Research Institute has been following up on programs to preserve and expand camel breeding in Iran in recent years. “Ecological camel development has been worked into provincial development plans for suitable regions such as Sistan and Baluchestan, Khorasan, and Yazd. These projects are being carried out under the execution wing of the Executive Headquarters of Imam’s Order and are receiving backing from national authorities.”

According to Asadzadeh, strengthening scientific and research infrastructure, supporting camel breeders, and pursuing genetic improvement through new technologies stand out as crucial strategies that can help stabilize the red meat market and bolster food security.

He pointed out, “Extensive work on camel nutrition, breeding management, and genetic enhancement has been underway in Yazd, and genomic studies have taken off, focusing on breeds with higher milk and meat yields. Current data on camel population and production is being recorded in several

provinces, including Ardabil.” Not long ago, the FAO sounded the alarm over camel extinction in Iran — a stark warning for camel-rich provinces. Of the nation’s camels, 99 percent of the one-humped breed belong to hot and arid zones, while the two-humped type thrives in colder climates. There are now only 300 to 400 two-humped camels left in Ardabil Province.

National registration of indigenous breeds by 2027

The National Program for the Protection and Registration of Genetic Livestock Resources, led by the Animal Sciences Research Institute of Iran, revolves around the registration and conservation of native breeds, the sustainable use of genetic reserves, and the improvement of breeding standards. The program kicks into gear for 10 at-risk livestock and poultry breeds, including camels.

Its main focus areas include preserving gene pools, enhancing economically valuable and reproductive traits, improving livestock longevity, developing new genetic combinations, calculating economic coefficients, defining selection goals and indexes, carrying out group breeding among small livestock, and conducting Omics-based analyses of key economic traits. AI-driven Omics analytics are set to unify current applications and map out future directions. Technical guidelines and gene bank catalogs will be rolled out, and national IDs for native breeds are expected to be drawn up by 2027.

Given the importance of protecting Iran’s camel population, two years ago, Agriculture Minister Gholamreza Nouri Qezeljeh put forward a proposal at the first International Camel Congress to register Iranian camel farming in the FAO’s Global Agricultural Heritage Systems (GIAHS).

The interview first appeared in Persian on IRNA.



◀ Bactrian camel (two-humped) in Shahsevan territories, northwest of Iran
● FATMA ZOLFAGHARI/ICCAS