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Pakistan

Post: Islamabad

Province of Punjab Proposes to Restrict Semen Imports

Report Categories:
Dairy and Products
Livestock and Products
Trade Policy Monitoring

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Report Highlights:
The Government of Punjab, Pakistan's largest agricultural province, is proposing minimum standards for imported semen that would severely restrict farmer access to improved dairy and beef semen. The move seems to stem from a provincial preference for traditional low-yielding cattle. Pakistan has an enormous and varied dairy sector. Given the national emphasis on expanding milk and beef production, it is not clear why the province would seek to limit farmer access to livestock technology.

General Information:
New Requirements Could Severely Limit Imports of Semen

The Government of Punjab, Pakistan's largest agricultural province, has proposed a number of measures that could significantly limit future imports of semen and restrict Pakistan's access to the genetics the country needs to develop its dairy sector. Pakistan has a large and diverse dairy industry ranging from small urban and rural farmers who may have a single cow or buffalo to large modern herds with the latest equipment in technology. Expanding milk production is a key component of improving farmer incomes and the availability of protein for consumers. However, the proposal from the Livestock Breeding Authority of Punjab would limit farmer access to foreign genetics.
The text of the proposal is provided below and specifies a number of minimum traits that would unnecessarily restrict market access and farmers' opportunity to make commercial decisions about breeding program. Additionally, the requirements that have been set for imported semen do not appear to apply to semen that is developed domestically. This inconsistency suggests that imported semen will be subject to a much more restrictive set of import requirements. Punjab has no authority or mechanism in place to regulate or approve imports. Hence, it is not clear how this set of requirements will be enforced.

Begin text of requirements for imported semen--

2.VI: Chapter 6

Guidelines and Standards for Import of Exotic Semen

Import of exotic semen must conform to breeding policy which requires development of indigenous breeds of various species to meet the indigenous and export demand of various livestock products and services. Progeny tested cattle semen is however, allowed for crossing with non-descript cattle both for dairy and beef purposes. Import of semen for species other than cattle for experiment (or other purposes) will require special permission.

1. **Dairy Cattle**

Breeds: Holstein and Jersey
Form of semen: Frozen in liquid nitrogen (in plastic straws)
Bull's attributes:

1. Origin should preferably be (but not restricting to) United State of America, Canada, Germany and Australia. Other countries only when average performance of daughters meet the laid down criteria.
2. For Holsteins, average lactation milk yield of daughters in a standard lactation of 305 days should be at least 10500 litres for North American, 8500 litres for European and 6500 litres for Australian setups. Daughters under multiple production systems should have average milk yield equivalent to European production setups. Average lactation fat% of 3.7% or better and average

protein 3.0% or better.

3. For Jerseys, average lactation milk yield of daughters in a standard lactation of 305 days should be at least 7500 litres with average fat% of 4.8% or better and protein, 3.6% or better. These averages may vary and will be kept close to yearly averages reported by International Committee for Animal Recording (www.icar.org) for various countries.
4. Should have at least 50 daughters performance recorded in 20 or more herds with better than 80% accuracy of production traits. If genomic information is added to recorded performance, accuracy will increase.
5. Estimated Breeding values or Predicted Transmitting Abilities (Gnomic or otherwise) or for milk, fat and protein yields should be positive in the most recent genetic evaluation. Semen from negatively ranked bulls for production traits is not allowed.
6. Bull should be improver for overall Type (positive PTA for overall Type) alongwith positive PTAs for Udder and Feet & Legs conformation.
7. Bulls should not cause more dystocia than average bulls in the recent most genetic evaluation nor should their daughters prone to mastitis than the average bulls.
8. Bulls should preferably be A2A2 genotype for Beta casein.
9. Bull should be free from genetic disease such as Bovine Leukocyte Adhesion Disease, (BLAD) Deficiency of Uridine Monophosphate Synthetase (DUMPS), Complex Vertebral malformation (CVM), Citrulinemia, Factor XI etc and should have normal karyotype.
10. Should be free from scheduled reproductive problems transmittable venereal diseases duly certified by the concerned department of the country. Health certificate from competent authority of the country of origin will have to be supplied.
11. The motility percentage of sperm in frozen semen should not be less than 50% after thawing of semen.
12. Each semen straw (0.25/0.5 ml capacity) should carry at least 20 million sperms for non-sexed and 2 million for sexed semen. Accuracy of female births should be 90% or better with sexed semen.
13. Should be registered with and traceable from Breed Association / Semen Supplier Website

2. Beef cattle

Breeds: Angus, Hereford, Charolais, Brahman (for export of beef from crossbreds)
Form of semen: Frozen in liquid nitrogen in plastic straws
Bull's attributes:

1. Origin should preferably be (but not restricting to) United State of America, Canada, Germany, Australia and Brazil.
2. Must be registered with relevant Breed Association
3. Expected Progeny Difference (or breeding value) should be positive (above average) for weaning weight, yearling weight, calving ease and dressing percentage.
4. The accuracy value for various traits should be greater than or equal to 70%.
5. The sperm concentration per frozen dose of semen should be at least 20 million in 0.5/0.25ml straws The motility of sperms in after thawing of frozen semen should be better than 50%.
6. The donor bull should be certified not to have any genetic and venereal diseases.