## MARKET STUDY ON LIVESTOCK GENETICS IN MEXICO

## **Executive Summary**

Mexico offers attractive business opportunities for livestock genetics, given the great relevance that livestock activities have in Mexico's socio-economic context. Around 60% of the Mexican territory is dedicated to livestock activities and there are more than 3 million livestock production units.

Over the last decades, Mexico's beef, pork and dairy industries have experienced substantial developments. Sheep and goat husbandry have also had an explosive growth in Mexico. Mexican producers in the expanding livestock intensive systems are increasingly using modern genetic improvement technologies such as artificial insemination and embryo transfers. For example, around 53% of the bovine breeders in Mexico use artificial insemination and 18% use embryo transfers.

The Mexican livestock industry and the government are conscious about the importance of a constant improvement of livestock genetics, in order to achieve better productivity and competitiveness in livestock production. This was reflected in the creation of the National Council for Livestock Genetic Resources (CONARGEN), which plays a key role in the development of pubic policies aimed at improving livestock genetics, as well as on the type of breeding animals and genetic material (both domestic and imported), that are introduced in Mexican herds. CONARGEN is operated by the Registered Livestock Breeders' Associations and the National Confederation of Livestock Associations (CNOG), and has a strong influence on the Mexican Ministry of Agriculture, Livestock, Rural Development, Fisheries and Food (SAGARPA).

There is a strong need for improving genetic quality in Mexican herds as a measure to obtain higher productivity, better quality products, and overcome challenges causing declines in animal inventories, such as droughts. As a result, the Federal and State Governments have various support programs for animal genetic improvement in Mexico, which provide funding for the purchase of high-end breeding animals and genetic material, such as: the Livestock Genetics Improvement Program, and the Strategic Project for the Reactivation of the Beef Production Chain and the Repopulation of the Domestic Herd.

Among the main breeds demanded in Mexico are: Beef cattle (Limousin, Angus, Beefmaster, Hereford, Brangus, Braford, Simmental Simbrah, Charolais Herd Book and Zebu); Dairy cattle (Holstein, Jersey and American Brown Swiss); Swine (York, Landrace, Large White, Hampshire, Duroc and Pietrain); Sheep ("Criollo", Rambouillet, Suffolk, Hampshire, Pellibuey, Black-belly and Kathadin); and Goats (Nubian, Alpino and Saanen).

Since faster results are expected from imported breeds, genetic progress in Mexico is still primarily achieved through imports of breeding animals, semen and embryos. Mexico has been importing more than 20,000 head of bovine cattle per year as a result of the on-going efforts to repopulate the beef and dairy cattle herds. Mexican imports of breeding swine attained a historic record of almost 42,000 head

valued at 14 million USD in 2015. Regarding live sheep, Mexican imports also reached a historic level of more than 50,000 head at almost 13 million USD in 2015.

However, none of these imports came from Canada, given that currently Mexico has a sanitary ban in place on imports of Canadian live sheep and goats. Mexico also reports consistent annual imports of bovine semen at around 20 million USD.

Currently, refrigerated semen has a higher use than frozen semen. However, recent methods of deep intrauterine insemination are enabling a higher use of frozen semen. The use of frozen semen is expected to continue growing in the future for the production of selected pure-bred breeding lines for replacement, prevention of diseases, and supply of farms with difficulties in obtaining refrigerated semen.

Mexico has been developing its own domestic capacity for the production of livestock genetics, including some modern and equipped laboratories throughout the country where genetic materials such as semen and embryos, are processed. Nevertheless, Mexico still has a strong technological dependency on imported livestock genetics.

Several Canadian genetic companies have a significant presence in Mexico, consolidating Canada's position as the second largest supplier of animal genetics to Mexico after the U.S., which is the largest international competitor in the Mexican livestock genetics market. Nevertheless, the recent appreciation of the U.S. dollar against the Mexican peso may be a key factor that could hinder imports of U.S. genetics. New Zealand has also appeared as a relevant competitor with a large shipment of breeding sheep and heifers exported to Mexico in 2015.

Mexican livestock ranches, stockbreeders, dairy and meat cattle raisers are the main potential buyers of breeding animals and animal genetic products. These buyers are manly situated in the northern and central regions of Mexico, where intensive cattle production systems are located. Imports of breeding cattle, semen and embryos can be done directly by cattle growers or by sales representatives of international suppliers.

Mexico is host of several livestock events throughout the year by specie, region or even breed. Livestock producers in search of improving their farm genetics are typically present at these events, which serve as relevant distribution channels for livestock genetics. In fact, one of the main suggested market entry strategies for Canadian animal genetic suppliers is precisely to attend these events, with the purpose of meeting livestock producers in search of livestock genetics, and identify business leads.

Other suggested market entry strategies for Canadian exporters include: targeted visits to meet specific buyers, distributors, associations and other key players in Mexico; establish contact and develop relationships with key industry associations; approach local distributors and importers of livestock genetics; and establish contact with Mexican companies specialized in providing artificial insemination and embryo transfer services for livestock producers.