

Teleagro: software architecture of georeferencing and detection of heat of cattle

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Abstract.

The systems of livestock production contribute in a preponderant way to improve the quality of life of the communities, since it allows to support the production of the daily sustenance of the communities, to conserve the ecosystems, to promote the conservation of the wild life and to satisfy the values and traditions cultural Latin America, with its large wilderness areas, and a privileged climate favors the maintenance of livestock, to meet the demands of food and ensure regional and global food security. In Colombia, the agricultural sector contributes approximately 11.83% of the national GDP at current prices, according to the Bank of the Republic. Likewise, the livestock industry participates with 3.6%, in comparison with other sectors of the agricultural economy, the production of Colombian cattle doubles and triples to other sectors, such as poultry, coffee and floriculture. In addition, it contributes to the generation of employment in more than 25% of the total jobs generated in the agricultural sector and approximately 7% of the total employment of the Colombian economy (<http://www.banrep.gov.co/is/pib>). Within agricultural production, livestock occupy 38 million hectares, being 9 times larger than the area dedicated to agriculture. However, agriculture contributes 63% of the value of agricultural production, while livestock, mainly extensive, contributes 26% (FEDEGAN, Strategic Livestock Plan 2019). The large proportion of the area with agricultural vocation dedicated to precarious extensive livestock has explained the low agricultural productivity in Colombia, with very serious consequences for human and sustainable development. This document shows the results of the communications, software and hardware platforms to help the livestock sector to manage production.

Keywords: Technological system; Georeferenced detection; Zeal of bovine cattle