Software for simulation of milk production systems.

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There is a huge gap between technologies available for the production of bovine milk in universities and research institutions and technology effectively adopted by the productive system, this fact, evidenced by low milk production per cow of the Brazilian herd. The absence of models and softwares that to simulate the impact of investment decisions on technology is the biggest problem the adoption, preventing the milk producer and, agronomists, veterinarians, animal scientists, several technicians, students and even policy makers assess the economic and financial impacts and risks of investments in technology. In this perspective, it developed a software for the Embrapa Livestock Southeast Research Center as a contribution to the simulation and making investment decision in milk production technologies. The software allows to carry out ex-ante analysis technologies, allowing researchers to assess the economic and financial impacts of their research hypotheses, as well as enables field technicians to design and analysis of investment projects in technologies. The software was developed in C # language employing the Microsoft VISUAL STUDIO. The model used by the software assumes that land is a scarce resource and that its potential can only be exploited intensively through adoption of technologies. Once defined technologies for intensive production of summer fodder and supplementation in winter, determining the demand of animal categories for food, the software scales the flock, the areas for the production of fodder by category and milk production. Once given the flock, the software defines the investment required to adopt the technologies and also projects cash flows for the new production system, structured on the basis of new technologies to be employed and analyzes the economic viability of the new system.

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