

THE IMPORTANCE OF TECHNICAL ASSISTANCE FOR THE ECONOMIC SUSTAINABILITY OF DAIRY PRODUCTION IN FAMILY AGRICULTURE

A IMPORTÂNCIA DA ASSISTÊNCIA TÉCNICA PARA A SUSTENTABILIDADE ECONÔMICA DA PRODUÇÃO LEITEIRA NA AGRICULTURA FAMILIAR

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Dairy production in the region of Itapetininga, São Paulo state is mainly conducted in small farms, using family labor, with low production rates and low economic returns. In search of improvements, one of the producers, located in the municipality of São Miguel Arcanjo, sought technical assistance from the CATI *Leite* project. The property has an area of 35.6ha (20ha usable), very irregular topography and difficult access to water, electricity and transport. The objective of the present study is to investigate the importance of technical assistance in the economic return of milk production in family agriculture. Assistance to the farmer started in the second half of 2012 when daily average milk production was 44 liters. After four years in the project the farmer reached a volume of 121 L/day, an increase of 73%. The project's actions were mainly focused on production and use of bulky foods, improvement in the animals' diet, herd structuring and implementation of zootechnical and economic controls. Descriptive analysis was performed, using a relative frequency and graphical representation. The various actions of the CATI *Leite* project at the rural property changed the profitability of the activity, and at the end of 2013, the profit was R \$ -13,925.87, and in the last 12 months of the activity (September 2016 to September 2017), the profit was of R \$ 16,688.54. For profit assessment, the return on the capital invested in land was not computed. Technical assistance is essential for this change to take place, involving technology transfer, training, planning, evaluation of results and need for new actions. The relationship between technician and producer must be clear and the proposed technologies must have defined objectives. When evaluating the economic return of the activity, it is not possible to distinguish the impact of each action separately, but rather the result of a whole set of actions. The producer should be aware that often the economic returns are long -term, which can be demonstrated by the evolution of the net income of this farm, in 2013 it was R\$ -13,925.87, while in 2014 was R\$ -9,284.08, in 2015 it was R\$ -7,514.21, in 2016 it was R\$ 4,091.82 and in the last 12 months (September/2016 to September/2017) it was R\$ 16,688.54. The farm obtained an linearly increasing economic return with the technical assistance promoted by the CATI *Leite* project ($Y = 7460 X - 2 \times 10^7$, $R^2 = 0.91$). The slow economic return of some actions, such as the increase in soil fertility, may result in worse economic evaluations at the beginning of the establishment of the new productive system, especially those that were based on extractivism. At present, the property produces 121 liters of milk a day, it exploits 2.5 ha intensively, out of a total of 6 ha, destined to dairy cattle, while rest of the useful area was leased for another activity. It is important to note that normally the intensification of production raises the risk of the activity. In 2014 the ratio between variable cost and total cost of activity was 50.2% and currently stands at 69.7%, reflecting the greater dependence on external inputs. The lack of clarification on the processes and results that will be achieved can lead to failure. Dairy activity is extremely complex and the follow-up through the technical assistance, guides the actions and directs the producer in his activities. The offer of official technical assistance is fundamental to promote changes in family systems, since most of the time this segment is not attractive to private initiative.

Keywords: economic returns, intensification of production, milk production, profit assessment.