

DAIRY CATTLE ENVIRONMENTAL IMPACTS IN PARANÁ¹

IMPACTOS AMBIENTAIS NA BOVINOCULTURA LEITEIRA DO PARANÁ

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Brazil is among the six larger producers of cow milk in the world. In 2010, the national milk production reached 30.7 billion liters, corresponding to 4.8% of total world production, according to official data (Instituto Brasileiro de Geografia e Estatística, IBGE). Paraná state has 114,488 milk producers, being responsible for 71% production increase between 1997 and 2006. Besides such remarkable figures, there are still important challenges to be surpassed in milk chain, which includes environmental adequation of livestock production. According to a study published by Banco do Brasil Foundation and Interamerican Institute for Agricultural Cooperation - IICA in 2010, social and environmental sustainability are among factors restricting milk chain competitiveness. Thus, this paper aims at assessing the adoption of good environmental practices in milk production, towards sustainable production. Practices included: plot rotation system; no-tillage technique; agroecology system; and practices for reducing water and energetic consumptions in milk cattle system. Methodological procedures in this research comprised: (a) literature review on milk agribusiness system and environmental adequation; (b) formulation of semi-structured questionnaires, including questions about environmental practices in 2011; (c) data analysis through descriptive statistics. Random sampling included milk producers in Santa Izabel do Oeste and Marechal Candido Rondon, in southwestern Paraná. Eighty producers were interviewed, equally sampled in both places, resulting in 79 valid interviews. As results, we could find that 95% of producers adopted at least one of those good environmental practices considered, mostly plot rotation system and no-tillage technique. According to literature, plot rotation favors soils quality and consequently increases forage availability, resulting in positive impact on natural resources. No-tillage agriculture, on its turn, causes less damage on soil surface and is less demanding on machinery and fuel. Besides that, it represents an economic and environmental costly technique. Among interviewed milk producers, 77.2% adopted no-tillage technique and 75.9% made use of plot rotation. Other practices were less used by milk producers, such as agroecology system (12.6% of sample); 20.2% informed to adopt technique to reduce water consumption, such as the collection of roof water and the construction of cisterns. Finally, 12.6% of producers adopted energy saving practices. We concluded that practices adopted by great number of producers can be more related to economic and quality variables, with an indirect effect on environmental factors. It means that, although practices can help to reduce negative environmental impact, there are still many possibilities to increase environmental sustainable competitiveness in dairy cattle in Paraná.

Key words: environmental impact; milk producers; sustainability.