

4.15 Brazil – Regional Milk Developments 2001 - 2006



Embrapa

R. Zoccal, L. A. Stock, G. R. Carvalho,
H. C. Filho, F. L. Garagorry

SP 3891
P. 136

Introduction

In 2006, Brazil produced 25.7 billion litres, generating an income of about 6 billion US-\$, involving nearly five million people, of which 1.3 million are dairy producers. In this special study a regional analysis of the Brazilian milk production and its growth in the last five years was made in order to get an insight into the production potential.

Procedure

The first part of the analysis was based on the classification of micro regions according to the amount of milk produced per area and clustered in four groups each of which represents 25 % of the national production. The following step was to group the micro regions into ten main zones, according to geographic proximity, of high production density (groups 1 and 2). In the analysis of the dynamics of milk production, the difference in the volume produced (millions of litres) in the period of 2001 to 2006 was calculated. The micro regions with higher variations are identified in the maps.

Milk production

The micro regions of higher density of dairy production are shown in Figure 1 and Table 1. Together they totalize 50 % of the national production, and are grouped in ten production areas. The five main zones are the following:

- **L1 Zone** – The South Region concentrates the highest number of micro regions with high density of dairy production per area. This includes the North of the Rio Grande do Sul, West of Santa Catarina, and Southwest of the Paraná. This zone covers an area of 109 thousand km² producing more than 4 billion litres of milk, 17 % of the total;
- **L2 Zone** – Comprises the Center South of Minas Gerais, East of São Paulo, North of the Vale do Paraíba, and South of Rio de Janeiro. This zone of production covers an area of nearly 170 thousand km² and produces 4 billion litres of milk, 16 % of the total;
- **L3 Zone** – Located in the Zona da Mata of Minas Gerais, North of Rio de Janeiro and South of the Espírito Santo, it covers 48 thousand km² and produces one million litres of milk, representing 4 % of the total of the country;
- **L4 Zone** – State of Goiás. It produces 1 billion litres a year, and covers an area of 51 thousand km²;

- **L5 Zone** – The micro regions of the Triângulo Mineiro and the Northwest of São Paulo, annually produce 702 million litres in a total area of 35 thousand km².

The other five zones of high density of milk production are smaller in size. Zone 6 is located in the Northeast Region, in the states of Pernambuco, Alagoas and Sergipe. Zone 7 refers to Rondônia, specifically in the micro region of Ji-Paraná. Regarding the state of Paraná, the micro region of Ponta Grossa represents Zone 8, with a production of 253 million litres per year. Santa Catarina is the location of Zone 9 with a production of 137 million litres of milk. Finally, Zone 10 is located between Minas Gerais and Espírito Santo. These ten zones of higher density of milk production, occupy 5.6 % of the domestic territory and produce approximately 50 % of the total annual milk production of Brazil.

Dynamics of production growth

The dynamics of the dairy production in Brazil takes into consideration the changes in volume of milk produced during the last five years (period of 2001 to 2006). As can be seen in Figure 2, the Zones of the most specialised milk production are also those with higher production growth: North of the Rio Grande do Sul, West of Santa Catarina, and Southwest of the Paraná (L1). There are two regions which are of special interest in terms of total milk produced. However, they do not appear prominently in the Zones of production. The first of these regions is Center-East of Pará, Center-West of Maranhão, and North of Tocantins and the other is the South region of Bahia.

Potential regions of milk production

The Brazilian dairy milk production is growing significantly, either in terms of greater specialization of the activity and/or the incorporation of new areas, as is the case in the North of the country.

Micro regions of high milk density

Zone	State	Area km ²	Production Mill liters	Density 1,000 L/km ²
L1	SC, RS and PR	109,546	4,392	
L2	MG, RJ and SP	170,225	4,076	
L3	MG, RJ and ES	48,203	1,095	
L4	GO	51,227	1,061	
L5	SP and MG	35,254	702	
L6	PE, AL and SE	22,795	579	
L7	RO	25,024	435	
L8	PR	6,706	253	
L9	SC, RS and PR	6,706	137	
L10	MG and ES	5,878	102	
TOTAL		481,564	12,832	

SP 3891
P. 136

Explanations

Data: 2001 to 2005 as available from IBGE statistics. Source: IBGE/Agrotec – SGE/Embrapa and own calculations. Abbreviations: SC= Santa Catarina, RS= Paraná, MG= Minas Gerais, RJ= Rio de Janeiro, SP= São Paulo, ES= Espírito Santo, GO= Goiás, PE= Pernambuco, AL= Alagoas, SE= Sergipe, RO= Ron

SP 3891
P. 136



Dairy Report 2007

For a Better
Understanding of
Milk Production
World-Wide



IFCN
International Farm
Comparison Network