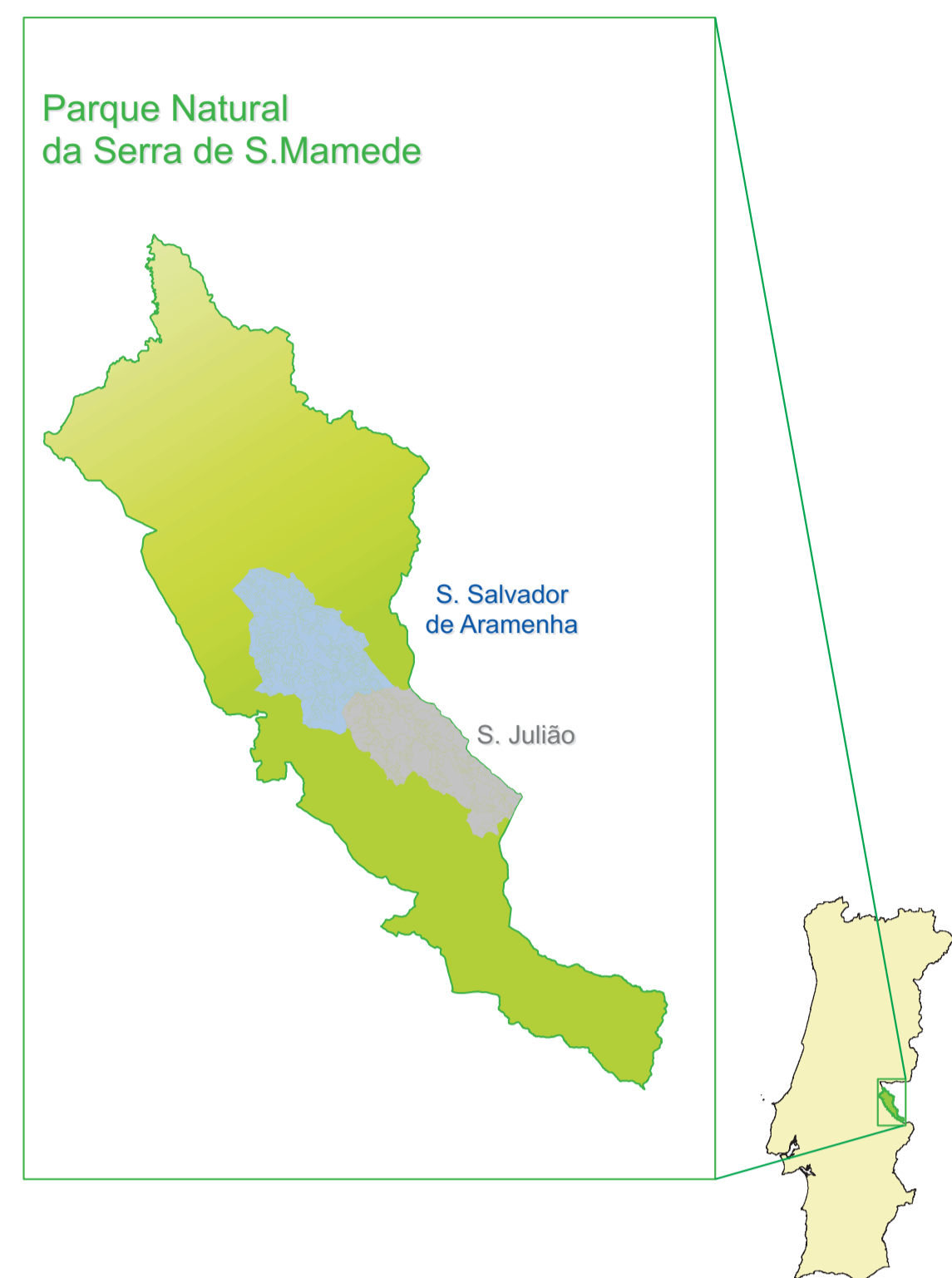


DID LAND ABANDONMENT FOR THE LAST DECADES INDUCE SIGNIFICANT LANDSCAPE CHANGES AT S. MAMEDE NATURAL PARK (PORTUGAL)?

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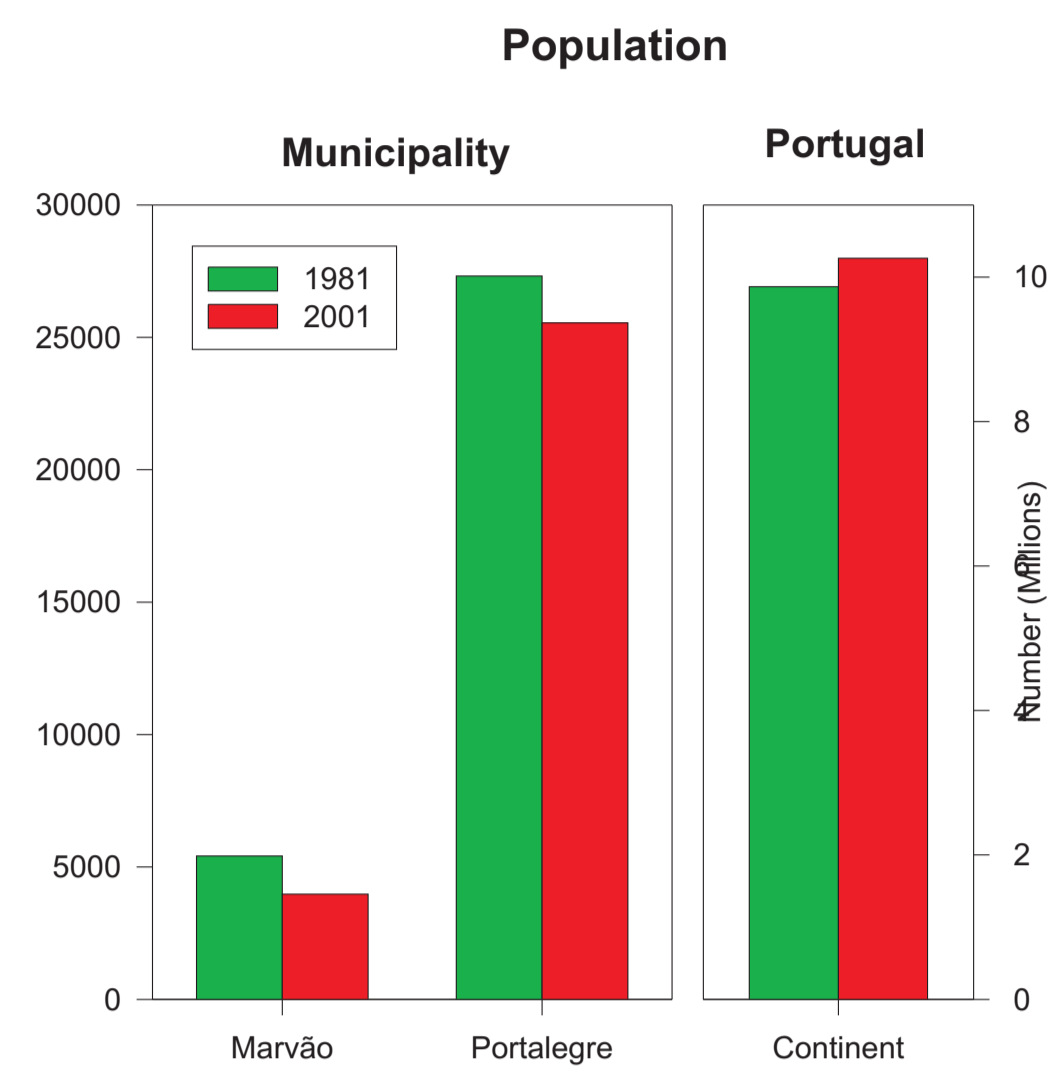
¹ Escola Superior Agrária de Castelo Branco, Quinta Sr.^a de Mércules, 6000 Castelo Branco

² Parque Natural da Serra de S. Mamede, Rua General Conde Jorge d'Avillez, 22-1º Dto, 7300 Portalegre

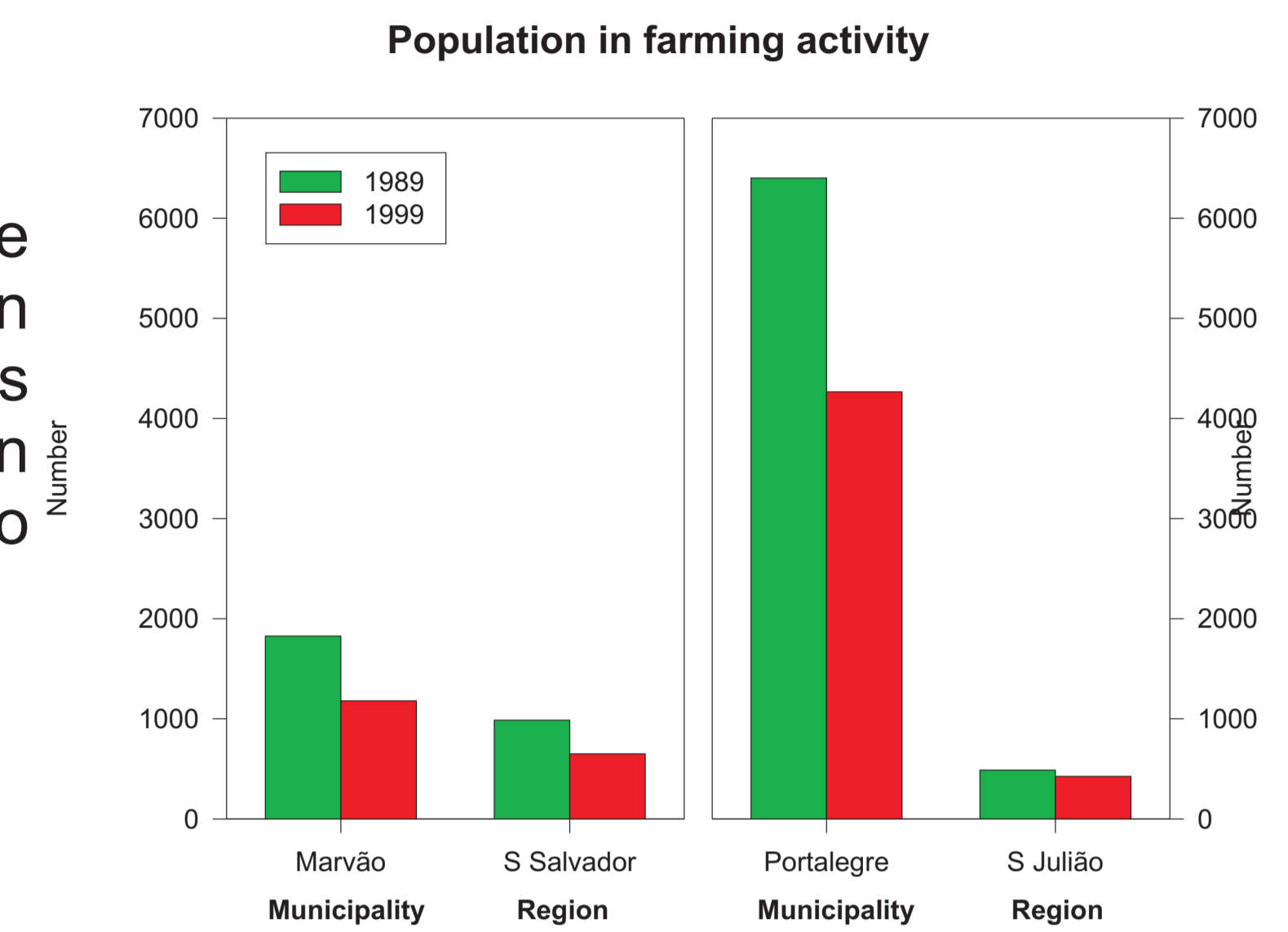


The S. Mamede Natural Park includes a mountain area, distributed along S. Salvador de Aramenha (Marvão municipality) and S. Julião (Portalegre municipality) regions. Contrasting with the population evolution in Portugal for the last 20 years (+4%) the population decreased 27% in Marvão and 6% in Portalegre.

The land use was mapped in two different moments (1967 and 2001) and compared using ArcView GIS software.



Contrasting with the population evolution in Portugal for the last 20 years (+4%) the population decreased 27% in Marvão and 6% in Portalegre.

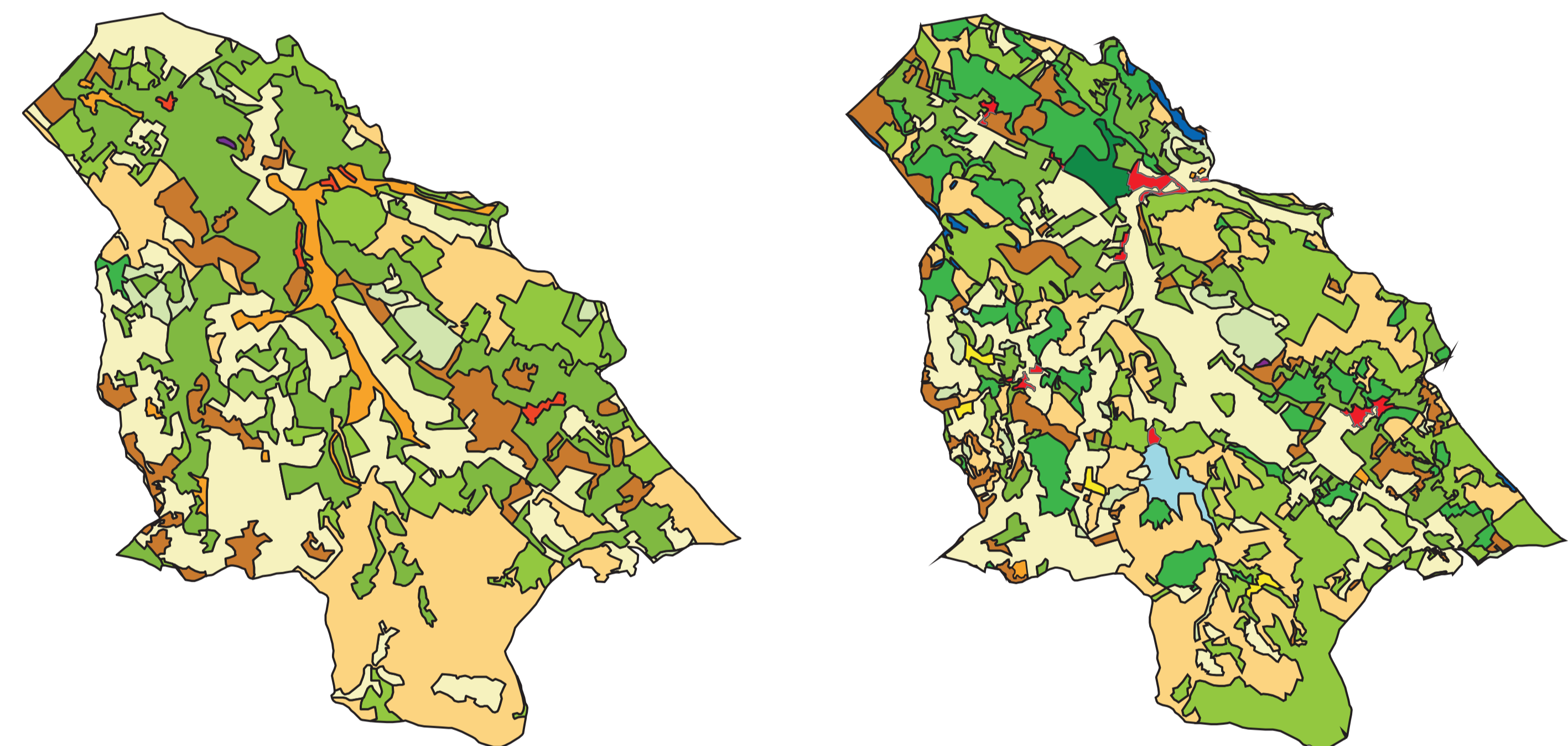


Official statistical data was used to complement the spatial analysis (population and agricultural census).

S. Salvador de Aramenha

1967

2001



0 3.630 7.260 Kilometers



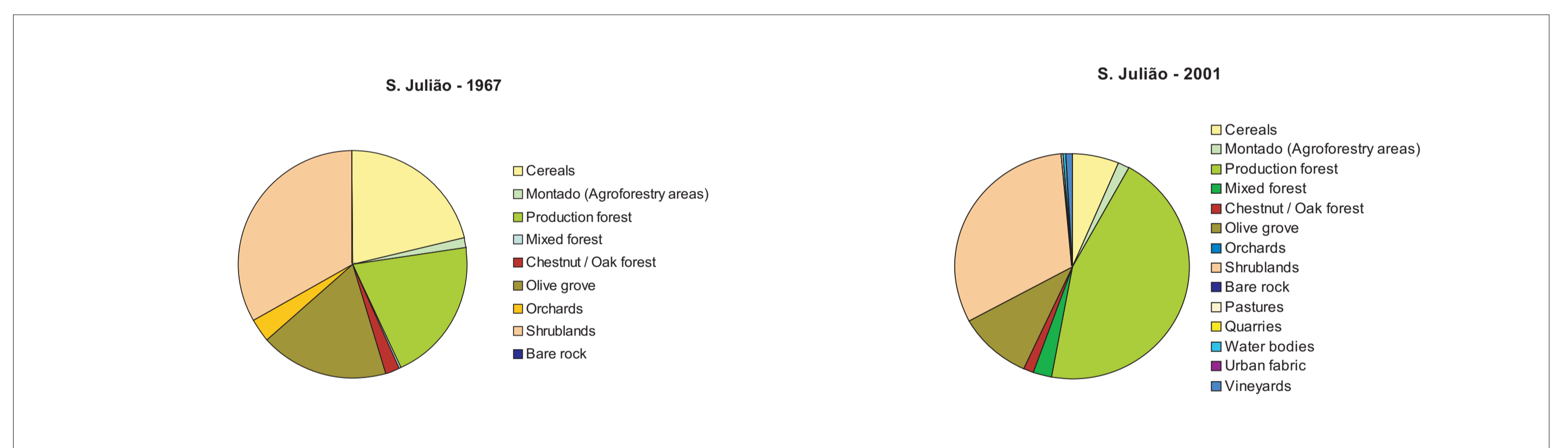
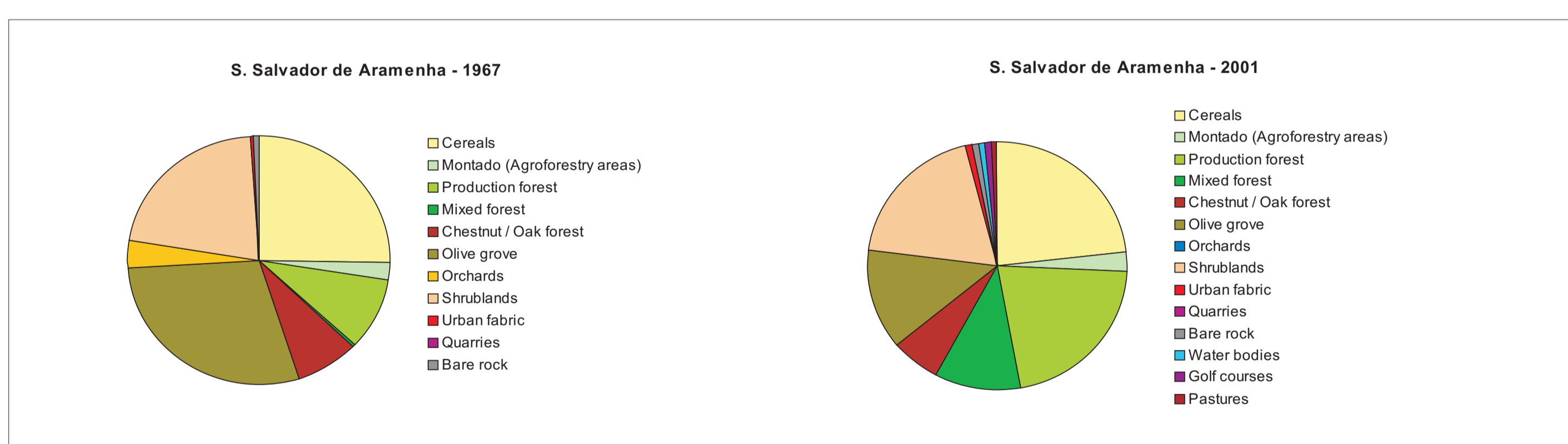
S. Julião

1967

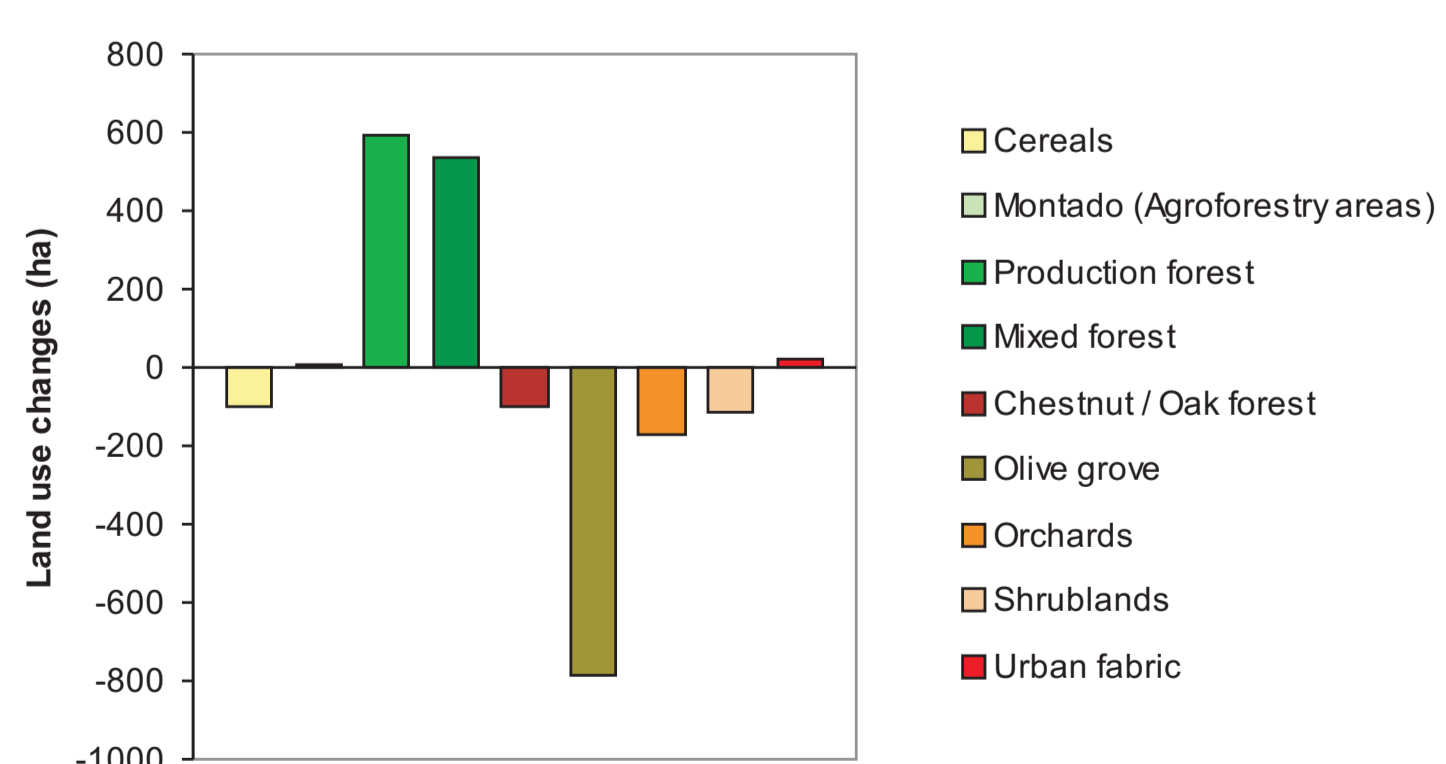
2001



0 1.925 3.850 7.700 Kilometers



S. Salvador de Aramenha (1967-2001)

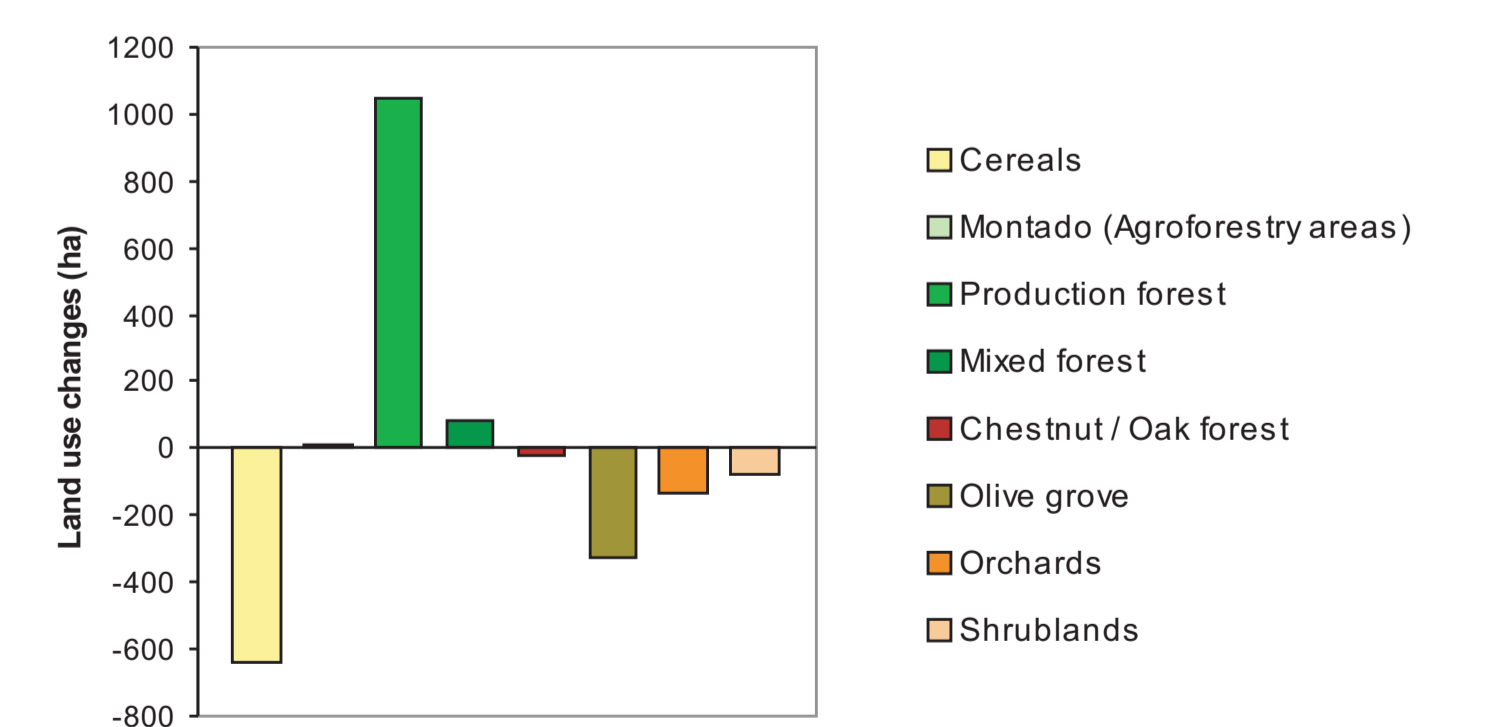


The increase in intensive forest use (1967-2001) was more than 120% for both regions; however, these changes had different origins.

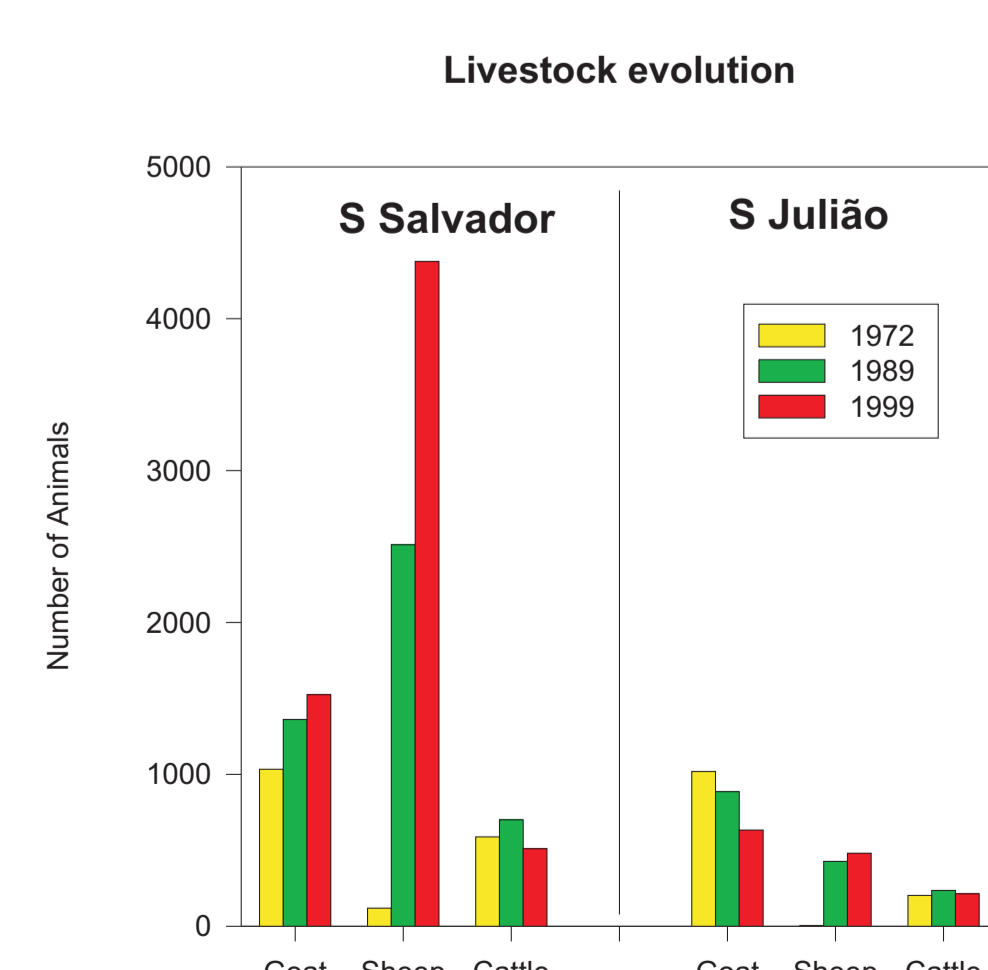
In S. Salvador the increase was due to areas being occupied for several uses, namely shrublands, olive groves and orchards.

In S. Julião the change resulted from the open field areas being replaced. The open fields area decreased 70%, representing only 6% of the total area of S. Julião at the present.

S. Julião (1967-2001)



Perhaps reflecting these changes, at S. Julião region the stock number did not change significantly as comparing with S. Salvador, where the number of heads increased (1972-1999) with emphasis on sheep (119 to 4377 ewes).



New land uses emerging in S. Salvador (golf courses, water bodies and fabric) might be qualitatively important and reflect the establishment of other economic activities, absorbing people from farming business.