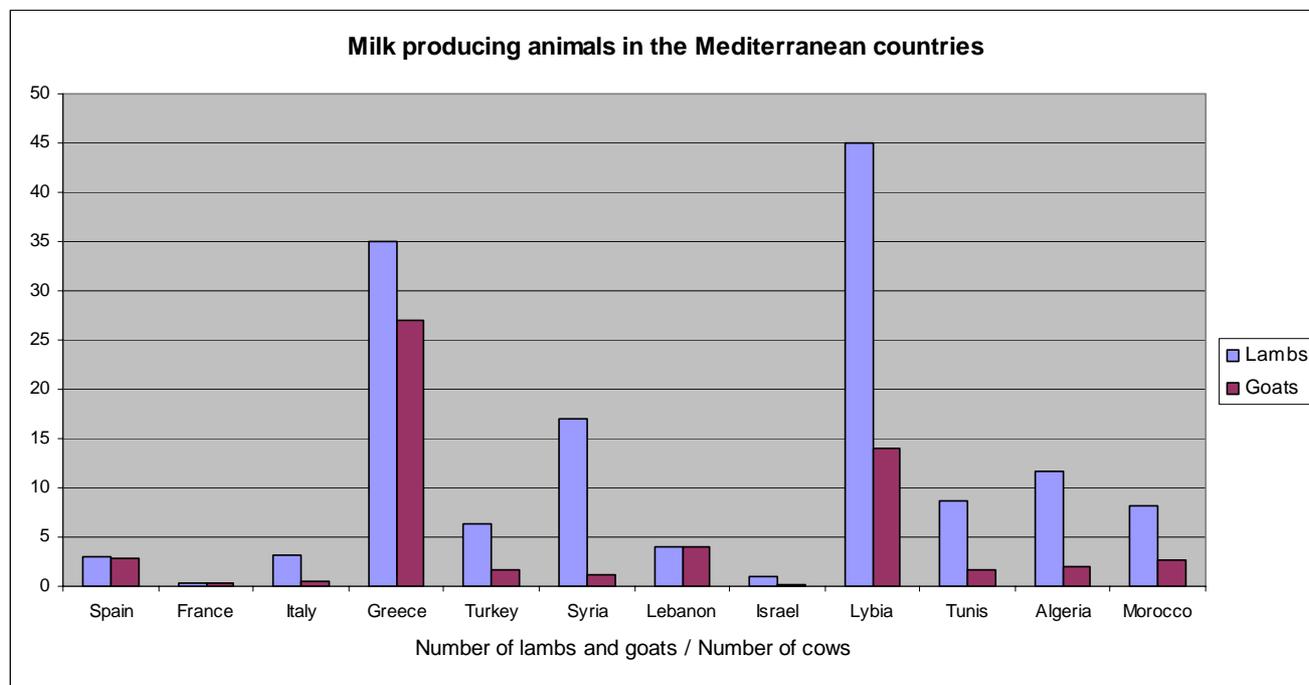


THE MILK STOCK-BREEDING IN THE MEDITERRANEAN

In both shores of the Mediterranean, very different characteristics determine the different types of cattle exploitations being developed. An important difference can be found in mammals raised in different countries. The following graphic shows the number of lambs and goats with regard to the number of cows in diverse Mediterranean countries (in all countries – except for France, and Italy and Israel in the case of goats – the proportion is superior to 1, which means that there are less cows than lambs and goats, but the milk production of cows is much superior to the one of the other two animals).



Source: M. de Rancourt and A. Mottet: *Mediterranean Animal Production: development or decline?* Options Méditerranéennes Series A n. 78, 2007.

The relation between young ruminants and cows is superior than that in other countries of the South shore (Greece is an exception on the North shore). In the North shore it rains more often, there are pastures and the milk is mainly obtained from cows. In the South shore, with less water and much sunlight, it is more usual to obtain milk from lamb and goat, and in some areas also from camels and dromedaries, animals that need a lot less water than cows and they can pasture in more arid land. In the east shore we can find two types of behaviour.

There are also differences in the public subsidies regarding to agriculture and stockbreeding, much more present in the countries of the European Union, as well as in the measures of protection of the market. The progressive elimination of the international trade barriers, promoted by the World Trade Organization, could facilitate an increasing flow of goods in the South coast up to the North, since in the south the costs of production are lower. However, it is actually translated into a bigger flow North --> South of milk and meat (and a bigger flow South --> North of fish), which does not favour at all the cattle farmers on the South shore.¹

Even though intensive exploitations in the North shore are clearly the most present, in the South shore there are more extensive exploitations, especially in the case of lamb and goat, and they combine the production of milk and/or meat with other activities such as rural tourism or the sale of handicrafts.

Cattle raising on the South shore has two important points on its favour. The first one are the social alarms generated from the diverse cases of animal diseases (BSE, hormones in bovine meat...), which provides a market advantage to the countries where the health of the animals is better. And the second one is the increasing consideration that the european countries have of sustainable production systems, which could make them raise their interest in the South in order to learn from its ways of exploitation. A transfer of technology in an opposite sense to the usual, also very useful for the european shore of the Mediterranean if,

¹ A. Lipchitz: *La libéralisation agricole en zone Euroméditerranée. La nécessité d'un approche progressive.* Notes et études économiques n. 23, Agriculture and Fishing Department of France, 2005.

perhaps due to climate change, it has to fight against droughts like the ones recently happened. In the arid french region of Ardèche a very sustainable agricultural system is being developed, based on the knowledge of its promoter, a native of Algeria.²

Cow milk: the case of Morocco³

When Morocco obtained independence from the colony, in the year 1956, it established agricultural policies in order to guarantee a good level of food sovereignty and work places in the field. The policies turned out to be highly successful, and the local supply of basic food such as milk was above 60%.

In the 1970's, while the population grew quickly and became more urban, the government of Morocco started to boost the specific exploitations of cows for the obtention of milk, giving subsidies for the purchase of inputs (concentrated fodder, machinery...), protecting the milk imports and guaranteeing a good price for the cattle farmers (up to 75% of the price of sale to the public). This is how exploitations were created, even in the areas where the raising of cows could not be given naturally (due to climate conditions, as we have already mentioned). They were, therefore, "artificial" exploitations and with a certain degree of intensification, depending on the government help that provided with raw materials that were "transformed" into low quality milk.

In the 1980's came the Plans for Structural Adjustment (PSA), promoted by the World Bank. The incentives to the local agricultural and livestock production were eliminated (subsidy of inputs) as well as the protection of the price for the cattle farmers. These started to be negotiated with the transforming lactic industry, which took the greatest part of the profit (keeping the price for the cattle farmers but raising it for the consumers). The proposal for the exploitations was to take another round in the process of intensification, importing genetically selected cows and applying the model of feeding and mechanization, characteristic of current intensive exploitations in the Northern countries. This brings a major productivity of milk, totally dependant however on the purchase of concentrated fodder (especially the more milk wants to be produced).

Less than 20% of the exploitations succeeded to apply this new degree of intensification. The profitability didn't have to be attributed to the state subsidy of the inputs, but to the greater productivity of the cows. Some of the farms that did not succeed found economic viability by producing milk and meat or just meat, even with races of cows selected for the production of milk, and with more extensive techniques. The number of exploitations remained similar to the previous to the application of the PSA, but many of them continue to produce small or moderate quantities of milk.

² M. de Rancourt and A. Mottet: Mediterranean *animal production: development or decline?* Options Méditerranéenes Series A n. 78, International Center of High Mediterranean Agronomic Studies – CIHEAM 2007.

³ M. T. Sraïri: Dairy *cattle systems in Morocco as affected by structural adjustment policies.* Options Méditerranéenes, series A. n. 78, 2007.