



Informationen zur Umwelt und für Naturreisende auf Kreta: Information about the Environment and for travellers in Crete:

Crete's agrarian economy: tillage farming, pastoral economy To the development of land use in Crete



The small-scale agricultural landscape in Crete is dependent on the natural area (Geology, Relief and Climate; therefore see also our leaflets No. 054-04/E, 081-05/E, 082-05/E and 085-05/E), which can be differentiated in 3 types. Well usable are the Northern coast plains, which are formed by the back-country of the large bays. In addition, the valleys and lowlands are arable farming useable (e.g. the Messara; there are also the oldest archaeological evidence of a field culture on Crete). The third agricultural sector is formed by the large valleys in the mountains (e.g. Lassithi Plateau). Since the beginning of the tillage farming in Crete the agricultural landscape is characterized by the Mediterranean triad. The nutritional base was laid by the cultivation of wheat, olives and wine. At the same time sheep and goats were held and vegetables were cultivated. Although the classic Trinity is a form of subsistence farming (for the purpose of the self-sufficiency), Crete produced during the ancient times so much grain, that this was exported to the major cities on the Mainland. This changed only at the beginning of the Turkish occupation (1669), because many fields no longer were built. Since then Crete is dependent on cereal imports.

The cultivation on Crete is characterized primarily by tree crops, where the olive-growing cultures with over 80% have the highest proportion, followed by citrus fruits (oranges, mandarins). Chestnut, walnut, almond, peach, Apple and carob tree today play a minor role. In the agriculture and horticulture, numerous vegetables are grown (mostly to cover the regional markets). Along with this almost every farm grow wine. The limit of viticulture is at 1200 m. Except for wine (and Raki; see also the information leaflets No. 048-04/E and 052-04/E) the grapes are marketed as table grapes or raisins. Today a growing area in the vegetable growing is now the cultivation of tomatoes, peppers, cucumbers and (the small) bananas in greenhouses. They are produced (especially for export) in the South of Crete (around Ierapetra) since a Dutchman in the 1960s made the greenhouses popular in Crete.



Picture above: Harvester - "Pre war model": new wheeled, it still provides its service; seen in the Amari-plain 2004



Already in prehistoric times, sheep and goats are the most common animals in Crete's pastoral economy ¹⁾. They provide meat, milk, cheese, wool and skins. Today more and more livestock is kept due to the increased demand of meat as a result of tourism. About 50% of the area of Crete today serves as grazing.

"Free running" cows and pigs are very rare to see (as opposed to goats and sheep) on Crete. Simmental cattle (fig. left; 2003) and pigs in the muddy (with piglets in the background figure right; 2004) we have met only a few times during 27 travels to Crete.

Pictures: H. Eikamp (1) / U. Kluge (3)



¹⁾ The pastoral economy existed after 1669 Crete as a special form of remote agricultural, the *KALIWIA FARMING*. Today, the Kaliwia farming is almost completely disappeared. The tribal villages in the mountains are often abandoned or converted to "Alpine pastures". Around them are often old, no longer used terraces of cereal growing. Where the tribal villages have been preserved, today commonly two villages with similar names are close together.



Pictures are showing wheat fields with stone stockades (to protect against erosion) and in terraces. Today they are only rarely to find on Crete; however Greenhouse plantations (e.g. bananas), in which mainly vegetables and fruit are grown are more common. The products from the agriculture and crop production/horticulture intended almost exclusively for the regional markets and are marketed by the producers themselves (fig. right: Regional market at the port of Heraklion) **Pictures: U. Kluge (05/2005)**

The use of forests should not go unmentioned in land use. In prehistoric times, the island was covered with extensive forests; with the beginning of Agriculture began their destruction. Special needs were established by the massive shipbuilding under the Minoans, Athenians and Romans. The constant need for solid fuel in the form of charcoal joined in. Finally the "sacred woods" were cut down in the middle ages. Intensive grazing (and charcoal production; see our leaflet No. 012-04/E of the CRETE environmental information) have led subsequently to the crumb of soil erosion in many places and to permanent injury. Today, only around 10% of the area of Crete is covered with forest; these forests are mostly in very inaccessible areas (ravine-like valleys and steep slopes). New reforestation has failed so far due to the ranchers and private and municipal ownership.

Today the Agriculture of Crete shows a tendency to extend the olive holdings, the extension of irrigation tillage farming (and the new greenhouse varieties), as well as a further expansion of the livestock holding. The constraint of cereal cropping is continuing and to date the subsistence economy is preferred to modern agricultural work.



Large, covered by hardwood hillsides (figure left) can be found today only in a few areas on Crete. The same applies to larger, contiguous pine forests (or pine groves). Fig. right shows a damaged conifer; forest damage caused by froghoppers or Myxomycetes (slime moulds) be combated only by "Slash and burn" and so further decimate the forest – "more space for pastoral economy"

Pictures: U. Kluge (05/2005)