

SOIL EROSION IN GREECE

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(By Constantine I. Nevros.)

AN interesting article entitled "Poor Man's Cow" on the position of goat breeding in Greece appeared in "Soil Conservation" for October, 1938. The goat has many virtues, but it should not be forgotten that the goat is the animal responsible for the extensive destruction of Greek forestry, the consequent erosion of the soil of Greece, and the barren and arid character of so much of the country.

The history of soil erosion in Greece is not without interest. In classical times large portions of Greek forests were felled to provide lumber for the construction of Athenian triremes, but even before that time, according to Plato, forests were destroyed and in mountainous regions were often razed for various reasons. Even so, the phenomenon of erosion was of a rather local character. The goat was not so important as a destroyer in those days. The nomadic stock breeders of antiquity had at their disposal, in a country more or less thinly populated, sufficient valley land to allow them to remain in the lowlands.

The serious destruction of Greek forests appears to have started during the Roman invasion in Macedonia. The Greeks lost their fields in the fertile plains, and took refuge in the mountains, where they were forced to become stock breeders. The goat was to them the ideal animal because it can feed on twigs and shrubs unsuited to sheep and cattle. The descendants of these refugees appear to be the modern nomad Greek mountaineers.

The Turkish domination of Greece had a similar effect. On a larger scale than during the Roman occupation, the Greeks lost their fields and took refuge in the mountains where stock breeding was the only possible occupation. Arboriculture was out of the question because cultivation of trees requires a high agricultural standard and sufficient means of transport to markets.

The "poor man's cow," now in large domesticated herds, set about its destructive work. Every shoot and twig was nipped off as food as soon as it showed. When the large trees died they were not replaced and the hillsides gradually become bald spaces at the mercy of

the winter rains. Erosion followed the dainty cloven-hoofed prints of the goats.

Owing to the country's mountainous formation, the destructive effects of erosion in Greece were unusually rapid. Without vegetation the sloping sides of the mountains were incapable of holding together the soil, which was carried away by the torrential rains to the plains, which in turn became flooded marshes in the spring.

Few efforts were made to check the deadly work of erosion. In the Greek islands and along the coast, where climatic conditions favoured the production of valuable agricultural products such as currants, olive oil and fruits, terraces and drains were built. The restricted areas of plains available in the islands did not permit the abandonment of the soil. It was found possible to hold it together by terraces up to the summits of the mountains.

Only within recent years, and especially under the present Government, did Greece perceive the danger and take steps to combat it. To-day a systematic programme for planting trees on the slopes of mountains and channelising the torrents is being carried out.

The goat was recognised as the evil genius of erosion in Greece, but the problem was not an easy matter in view of the income derived from goat breeding. This is estimated to be about 738,000,000 drachmas (100 drachmas equals about 3/-) annually, while the aggregate value of goats in Greece is estimated in the neighbourhood of 1,600,000,000 drachmas. Some other means of livelihood must be found to replace the goat. Their mountaineer owners could not readily be absorbed on the plains.

The present National Government, after careful investigation of the question, seized the problem by its curving horns and passed the Compulsory Law No. 875 of September 28, 1937, by which it is provided that the goat will disappear gradually within a period of ten years from those regions where it is injurious.

The Greek soil, if cultivated systematically, can feed double the number of the present population (about 7,200,000). To do this, however, every square inch of soil must be preserved.