Unsustainable Development: The Origin of Ruined Landscapes in the Roman Empire*

We are today interested in growth, in increased productivity. In the case of agriculture this means making it possible for the same piece of ground to feed more people or at least to make it possible for the same number of people to have a higher standard of living. In a word, to enable two blades of grass to grow where one grew before. How well did the Roman Empire do when judged by this criterion?

Wherever the Romans established their rule they created, or stimulated, profound agricultural change, a kind of agricultural revolution,\(^1\) which is described for convenience, though with much simplification, as the introduction of the villa system.\(^2\) Its effect surely was the creation of a greatly increased agricultural surplus. And it was this, which in turn nourished Roman colonies, provincial urbanisation, Roman armies and above all the population of Rome itself, which by the time of Augustus had grown to something like a million inhabitants. The question is whether the Roman ‘agricultural revolution’ resulted in a permanent increase in the agricultural productivity of the areas involved. The conclusion of this paper is that it did not. The ‘growth’ initiated or stimulated by Roman rule was real and substantial. It was sustainable too, in that the systems created under Roman rule were stable for many years. But it appears that Roman agricultural growth almost invariably was succeeded by

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\(^2\) The description ‘villa’ covers a wide range of buildings from a solidly built farm-house of a holding large enough to produce cash crops, to a palace like structure with attached farm buildings, the centre of an estate. In the early colonial settlements in Italy the farm type were in the great majority, see F. Cambi, ‘Demography and Romanisation in Central Italy’, in J. Bintliff and K. Sbonias, eds., Reconstructing Past Population Trends in Mediterranean Europe. The Archaeology of Mediterranean Landscapes 1 (Oxford 1999), 115–127, esp. 124–126.
periods of decline, which often left the land less productive than it had been at the starting point of the development. Moreover the same cycle of growth and reversal seems to have been largely independent of physical and climatic conditions. At any rate it can be observed in regions that were totally dissimilar in terms of geology or climate.

Reversal when it came was gradual and spread over centuries. In Europe decline began in different regions at different times, but generally still within the period of the Early Empire. In Africa the development started later, and the ultimate collapse was later too. In the Near East dramatic expansion was a feature of the Late Empire, and the reversal came correspondingly later, but it came there also. My procedure will be to start with a discussion of three areas of Italy, and then go on successively to Baetica in Spain, to Northern Gaul and the Rhineland, to Africa and finally the desert fringe of what to day are Syria and Jordan.

The transformation of the area around the colony of Cosa began in the third century BC, with the foundation of the colony. Subsequently there was a steady increase in the number and density of solidly built farm buildings of every kind. Wine and olive oil were produced for the market on a large scale. The development reached a climax in the first century AD. Then a steady and continuous reduction in the number of sites set in. The people making the survey found c. 245 sites in occupation at the end of the first century AD, 115 at the end of the third, 84 by the end the fourth, 53 by the end of the fifth. One cause of this development was the amalgamation of properties into ever larger units. But an effect almost certainly was the emptying out of large areas of the countryside, as also of the city of Cosa itself, that is of the market centre of the region. Thus town and country declined together.

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