

THE PROCESS OF AGRARIAN EXTENSIFICATION IN THE REFORM OF THE CAP IN THE EUROPEAN UNION. A CARTOGRAPHIC EVALUATION.

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Abstract.

The dynamics of Spanish and European agriculture have been characterized by the processes of agrarian intensification, in the last 30 years. The start of the reform of the CAP provides the opposite effect having a tendency towards the low pressure on the rural surroundings. In this paper we present a cartographic evaluation of these processes.

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One of the most outstanding characteristic in the process of modernization experienced by the Spanish agriculture in the last 30 years is, nevertheless, the intensification of the growing system in determined lands opposite to the diminution of the peasant pressure on other agrarian spaces. It has generated a change in the landscape; in campiñas, fertile plains, high moorlands and mountainous areas of the different Spanish regions.

La Alcarria of Guadalajara - central Spanish region - is a very expressive example of what we have just said (figure 1). It is, in synthesis, a paramo or meseta that is topographically risen in relation to the valleys of the Tajo River and the Henares River which provide the setting for it. A calcareous platform tops the Alcarria which, at the same time, is crossed by different rivers, and all of them are tributaries of the Tajo River, which has opened, in its inlet, valleys of different widths. The slopes are formed by loams, clays and gypsum, while the fertile plains are covered with the deposits which are laid aside by the rivers that crossed them. The scarce rainfall (400-600mm), the contrasted temperatures (cold winters and hot summers) and not optimum soil conditions create a precarious environment that is easily unbalanced when the circumstances provide untenable settlements.

The traditional agricultural system knew how to lay down some norms of land use that made possible, nearly always, to keep its fertility. The different pieces of the landscape mosaic corresponded with complementary vocations: irrigated fertile plains, olive grove slopes, and cereal paramos. In the fertile plains, the annual crops were followed by constant rotations (wheat, potatoes, beans, garlic) together with fruit trees (walnut tree, quince tree, cherry tree) which used to be grown near the irrigation channels or on the river banks. The slopes, with less deep soils, were terraced to grow a dense olive trees plantation; this species has been essential in the Mediterranean agrarian arrangement because, it occupied more marginal lands and at the same time, the vegetable fat that was so necessary for the diet of the population, was obtained from it. The paramos were mainly occupied by cereals (wheat, barley), and were under biennial rotation that was used together with fallow; in this fallow some lands were grown with legumes (lentils, vetch, chickpeas) that left the soil well fertilized with nitrate for the next sowing. With regard to the forest - woods, scrubs and pastures - firewood and pasture were obtained and were energy for the house and food for the cattle; in this way the rural communities which tried selfsupplying completed their basic demands.

That agrarian system was dismantled at the end of the sixties. The rural emigration, the introduction of new technological resources in the rural world, the great demand of certain products made by the thriving urban centers and the internationalization of the commerce caused that transformation which was announced at the beginning. However, the basic structure of the land cover in the Alcarria lands remained, as it can be seen in figure 2: grain paramos, forest and olive groves slopes and fertile plains, that nowadays are grown with cereals and poplars. The landscape received impacts that bipolarized the attention. The cereal spaces intensified their use, while the forest and partly the olive groves spaces lost interest on the part of the farmer. Livestock lost resources exercising a minor pressure on the space. In fact, the use of new seeds, fertilizers and fitosanitary was joined to a transformation of the structure of the plots that made possible the reception of the machinery in better conditions. The profits fully duplicated at the same time as the fallow was abandoned, going on to a continuous land use. Opposite to these spaces, that were up to a point forced and with clear traces of environmental deterioration, other spaces remained and extensificate their use (suppression of systematic wood cutting, diminution of the cattle, carelessness of great part of the olive groves). In figure 3 that double process of intensification and extensification is shown.

The productive variety and a more balanced arrangement have changed into a homogeneity of crops and the great pressure on the growing land in the short space of a couple of decades. Nowadays the landscape sets up uniform spaces, without contrast or polychromy, against others in which their climatic recovery comes up again from their apparent ruin. These facts cannot be seen without the present perspective of the European Union. Since, in 1981 and 1985, it warned of the harmful effects of the agrarian intensification, not only in a productive but also in an environmental way, until the consecutive reforms of the CAP (1988 and 1992), the field lives a new process of important changes. Specifically, the reform of the CAP in 1992 has caused the development of accurate norms about the return to fallow and the introduction of growing species that regenerate the soil fertility. The effects have been immediate in our area of study.

REGION	INDEX FALLOW	% FALLOW	HEC DRY SOIL	HEC FALLOW TRADITIONAL	HEC FALLOW ROTARY	TOTAL HEC FALLOW	HEC DRY LAND
CAMPINA	30	23 06	33414 01	7712 17	3856 03	11568 2	21846 71
A ALTA	40	28 58	1414 77	404 35	151 56	555 91	856 86
A BAJA	90	47 37	11252 44	5330 29	888 28	6218 57	5033 87
			46082 12	13446 81	4895 87	18342 68	27736 44

The last map we present reflects a simulation of the impacts of the community norm (figure 4) that refers to the obligation of leaving a part of the cereal lands in fallow. The diminution of the cereal is very significant since, at present, about 18,000 hectares are separated from the vegetation cover every year. We are in the beginning of a new period where the environmental interest, a saturated market that is opened to the international competence and the peculiar demographic structure with a very old peasantry give rise to unexpected changes.

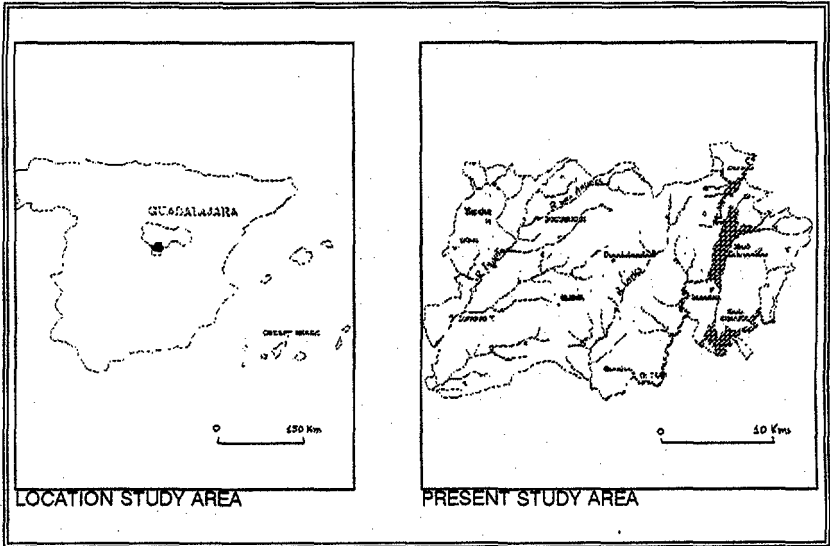


FIGURE 1

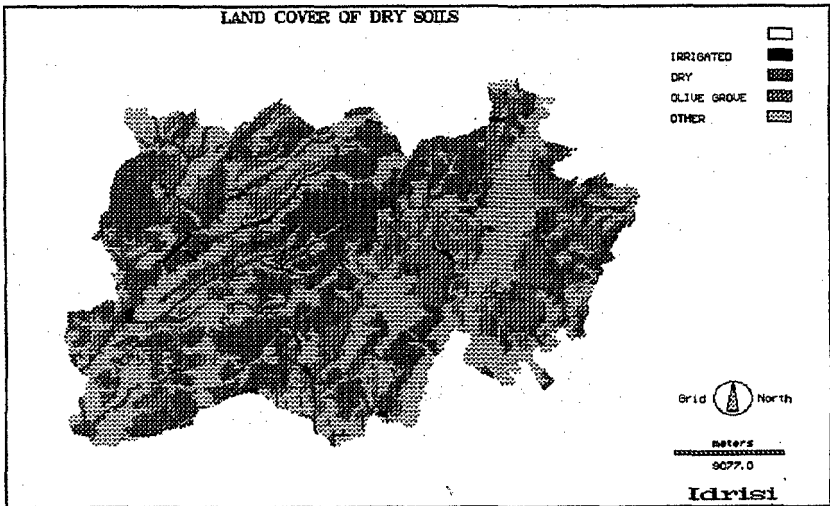


FIGURE 2

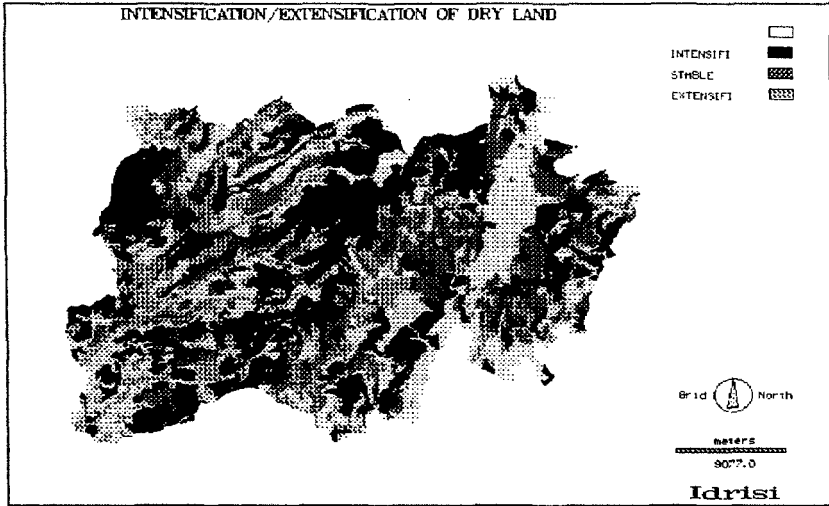


FIGURE 3

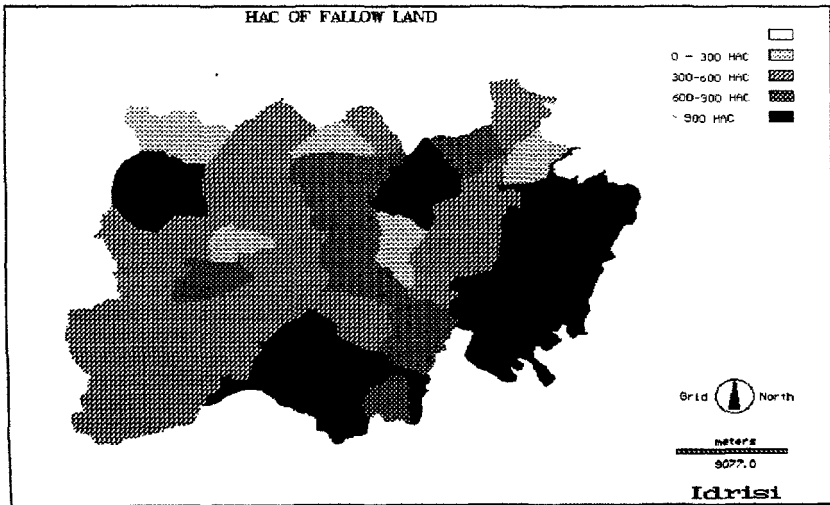


FIGURE 4