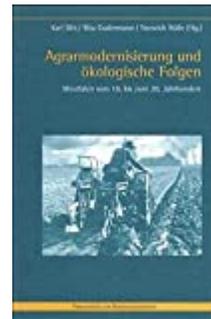




Karl Ditt, Rita Gudermann, Norwich Ruesse, eds. *Agrarmodernisierung und Ökologische Folgen: Westfalen vom 18. bis zum 20. Jahrhundert.* Paderborn and Munich: Schoeningh, 2001. xi + 812 pp. EUR 67.40 (cloth), ISBN 978-3-506-79613-4.



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While the correlation between agriculture and environment protection has ranked high in the public view and in politics since the 1980s, the reconciliation of agricultural/rural history and the history of the environment in German historical writing has been very slow. Only a few recent regional studies contain topics from both subdisciplines in their approach. So a meeting which resulted in this anthology of articles on the modernization of agriculture and its environmental consequences, as exemplified by the North German region of Westfalia, has a pioneering character. The choice of the twenty-nine authors—mainly historians and geographers, most of whom specialize in agricultural history, plus a number of economists, ethnologists, biologists, and experts in land use and environmental planning—demonstrates the interest of the publishers in including environmental studies within agricultural history through this interdisciplinary exchange.

For the publishers there are three aspects of environmental studies which are fundamental for agricultural history: the meaning of the environment for society (or how is it defined); views of the environment (or how is it perceived); and the influence of people on the environment (or how their behavior affects it). This leads to further, more specific, questions: what were the consequences of agriculture for nature before and during agri-

cultural modernization? Was agriculture before modernization in balance with nature or was it exploitative? Did modernization restore the lost balance or did it aggravate soil exhaustion? Were the changes seen as losses or as gains?

Rita Gudermann sees the coexistence of intensively and extensively used fields as typical of traditional agriculture, which permitted a high bio-diversity. *Naturale Äkonomie* (“natural economy”) kept up the ecological balance at the expense of much social hardship. Because of the increase in population, social differentiation and inequality resulting from *naturale Äkonomie* increased, a problem that people sought to head off by more intensified use of the fields. The ecological crisis which developed from this situation and the overexploitation of resources are therefore to be understood as a struggle over the distribution of resources and land.

It is not always clear if the disturbances of the ecological balance before modernization, as seen by the authors of this anthology, refer only to the crisis of the early nineteenth century which Gudermann sees as a transitional period, or if it also concerns the earlier *naturale Äkonomie*, which is valued positively by her. Karl Ditt remarks that the soil is endangered by overgrazing and the extraction of nutrients. The same phenomenon is seen by Bernward Selter for the forest soil. Georg Fertig

examines the use of the commons, taking the village of L hne as his example, but he cannot confirm the well-known problem of overuse, the “commons dilemma” or “tragedy of the commons,” in comparison to individually used fields. Michael Kopsidis views traditional extensive farming rather critically. The soil fatigue caused by extensive farming could only be stopped by the intensive farming of the nineteenth century, which is comparable to modern organic farming because it needs more manpower and it maintains systems of rotation. Whereas Gudermann finds evidence in the late nineteenth century of the extinction of the first animal and plant varieties, as a consequence of the change of the land cultivated by man and caused by the agricultural modernization, Hansj rg K ster confirms the highest level of biodiversity for the time between 1850 and 1950, because large populations of animals and plants still existed from the time of extensive farming, but simultaneously synanthropic animals and plants arriving in the wake of industrialization had found their niches.

The greatest number of contributions deal with the ecological consequences of farming and agriculture in the twentieth century. Karl Ditt details the known consequences of modern farming for soil, water, air, flora, and fauna, and correlates the changes in farming with the changes in consumer behavior. The different processes of agrarian modernization as exemplified in Westfalia are shown in detail by J rgen B schenfeld (chemical applications or *Chemisierung*), Burkhard Theine (technical developments or *Technisierung*) and Paul Walter (reallocation and consolidation of arable land). The focus of the third part of the anthology is the perception and discussion of the relationship between agriculture and the environment. Willi Oberkrome describes the conflicts between *Flurbereinigungsbeh rden* and environment ac-

tivists/conservationists in the 1950s, Bernd Tenbergen presents the development of *Landschaftspflege* since the eighteenth century, and Ulrich Hapke and J rg Haafke cast light on the difficult relationship between nature protection/conservation and agriculture/farming since the nineteenth century, including the closeness of conservationists and National Socialism which, on the one hand, produced the first environmental law in 1935 but, on the other hand, did not interfere with intensified farming because of the war-bound “Erzeugungsschlacht” (“production battle”). Co-publisher Norwich R e deals with agriculture and the environment from the viewpoint of the Green party and describes the functions of a Green minister for agriculture and the importance of preservation of manifold agricultural structures based on consumer oriented politics.

In a very inspiring final theoretical contribution, Verena Winiwarter presents a model to show the correlation of factors in pre-modern rural society. According to her, agricultural modernization is an adaptation of society to the decrease of soil fertility because of erosion. The subsequent over-correction led to the acknowledged increase of crops but also to the ecological consequences dealt with in this anthology. From this viewpoint the theory of a pre-modern agriculture in balance with its environment is no longer valid.

The publishers have succeeded in their effort to bring together agricultural and environmental history. The anthology deals with Westfalia but its relevance extends beyond this area and it will surely attract a wide acceptance. It will be particularly referred to out of interest in the ecological consequences of modern farming, but it is also of importance because it gives a comprehensive survey of the different types of agricultural modernization from the eighteenth century to the present day.

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