

primarily by citrus grove owners and large landowners. Moreover, the use of chemical fertilizers necessitated a change in technique,²⁸ which involved additional costs. Specifically, it was the costs of irrigation that is required when fertilizers are used.

The use of natural manure was a centuries old practice in Palestine as was the case around the world. In Palestine, it has been noted that the collection and sale of manure by “Bedouins, shepherds, and landless peasants” to citrus grove owners reduced the supply available for other uses in the 1930s.²⁹ However, it is not clear as to what extent this practice had on noncitrus agriculture.

The supply of manure was also reduced because of its use, in dry form, as fuel. During WWII, and although the demand for the citrus groves declined, the 1944-1945 Department of Agriculture’s annual report noted that there was a “serious shortage” in manure because of its use as fuel.³⁰ This was most probably because of the substantial increase in the prices of charcoal and kerosene, both of which constituted the chief sources of fuel for peasant households.³¹

The persistence and apparent increase in the use of manure as fuel was perhaps another indicator that the benefits deriving from economic expansion and

²⁸Kamen, 239.

²⁹Department of Agriculture, *Annual Report, 1934*, 24, as cited by Kamen, *ibid.*

³⁰Kamen, *ibid.*

³¹In the early years of WWII, the price of kerosene increased by 40 percent, while throughout the war the price of charcoal increased by 150 percent, see *S. A. 1944/45*, 112.