



#### The Historical Review/La Revue Historique

Vol 20, No 1 (2023)

The Historical Review / La Revue Historique



# This per so tieged a season of seaso

VOLUME XX (2023)

Section de Recherches Néohelléniques Institut de Recherches Historiques / FNRS

Section of Neohellenic Research Institute of Historical Research / NHRF

### Rural Social Inequality in Nineteenth-Century Greece

Sakis Dimitriadis

doi: 10.12681/hr.40069

Copyright © 2025



This work is licensed under a <u>Creative Commons Attribution-NonCommercial-ShareAlike 4.0.</u>

#### To cite this article:

Dimitriadis, S. (2025). Rural Social Inequality in Nineteenth-Century Greece: Agricultural Wealth and Farming Income in the Southern Peloponnese (1830). *The Historical Review/La Revue Historique*, *20*(1), 317–343. https://doi.org/10.12681/hr.40069

## RURAL SOCIAL INEQUALITY IN NINETEENTH-CENTURY GREECE: AGRICULTURAL WEALTH AND FARMING INCOME IN THE SOUTHERN PELOPONNESE (1830)

#### Sakis Dimitriadis

ABSTRACT: This article forms a part of a research project on agricultural wealth and farming income in the southern Peloponnese, as attested by a series of land surveys undertaken at the end of the Greek Revolution in territories controlled by the administration of Greek Governor Ioannis Kapodistrias in 1830. The article argues that the 1830 land survey forms an important primary source, unparalleled for nineteenth-century Greece, that so far has not been exploited by historians. Drawing evidence from a sample consisting of a number of rural communities in the provinces of Agios Petros (modern North Kynouria) and Arkadiá (modern Trifyllia), the article discusses wealth and income inequality in early nineteenth-century rural Greece, challenging the prevailing view of an egalitarian society with little discernible social differences.

Since the publication of an influential paper on the relationship between economic growth and income inequality by Simon Kuznets in 1955,¹ measuring wealth and income inequality trends in history has become a legitimate subject for economists and economic historians alike. The Great Recession of the late 2000s and the early 2010s sparked renewed academic interest in the long-term evolution of global inequality, largely fuelled by Thomas Piketty's *Capital in the Twenty-First Century*, originally published in French in 2013, and the debate it provoked among economists about its conclusions. In their quest to identify the

<sup>\*</sup> This research is co-financed by Greece and the European Union (European Social Fund, ESF) through the Operational Programme "Human Resources Development, Education and Lifelong Learning" in the context of the project "Reinforcement of Postdoctoral Researchers – 2nd Cycle" (MIS-5033021), implemented by the State Scholarships Foundation (IKY). I would like to thank Professor Socrates D. Petmezas, who supervised the project. I am also grateful to Vangelis Dimitriadis, Dimitris Dimitropoulos, Michael Festas and Constantin Irodotou for their help and insights.







 $^{\rm l}$  Simon Kuznets, "Economic Growth and Income Inequality," *American Economic Review* 45, no. 1 (1955): 1–28.

causes of rising wealth and income inequality in Europe and the United States since the 1970s, economists made extensive use of available historical data going back to the early 19th century or even earlier. In turn, this literature prompted even more economic historians around the world to follow through, unearthing and processing a great variety of primary sources (government surveys, social tables, taxable property records, grain tithe series, probate inventories, etc.) on preindustrial inequality at local, regional, national or global levels. As a result, we now have to hand numerous empirical studies and multiple series of statistical data on historical inequality, which, albeit obviously far from complete, allow for some comparisons over time and place, provided we set aside their dissimilar methodological approaches and divergent theoretical connotations.

For reasons that are to an extent relatively easy to explain, the case of nineteenth-century Greece is conspicuously absent from this discussion. Most experts would certainly agree that the shortage of official statistics or other

<sup>&</sup>lt;sup>2</sup> Thomas Piketty, *Capital in the Twenty-First Century*, trans. Arthur Goldhammer (Cambridge: Belknap Press of Harvard University Press, 2014); Anthony B. Atkinson, *Inequality: What Can Be Done?* (Cambridge: Harvard University Press, 2015); Branko Milanović, *Global Inequality: A New Approach for the Age of Globalization* (Cambridge: Belknap Press of Harvard University Press, 2016).

<sup>&</sup>lt;sup>3</sup> Although this is by no means an exhaustive list of the recent literature, on the United States see Peter H. Lindert and Jeffrey G. Williamson, Unequal Gains: American Growth and Inequality Since 1700 (Princeton: Princeton University Press, 2016); on the Low Countries, see Wouter Ryckbosch, "Economic Inequality and Growth before the Industrial Revolution: The Case of the Low Countries (Fourteenth to Nineteenth Centuries)," European Review of Economic History 20, no. 1 (2016): 1-22; on Spain, see Leandro Prados de la Escosura, "Inequality, Poverty and the Kuznets Curve in Spain, 1850-2000," European Review of Economic History 12, no. 3 (2008): 287-324 and Carlos Santiago-Caballero, "Income Inequality in Central Spain, 1690–1800," Explorations in Economic History 48, no. 1 (2011): 83-96, on Italy, see Guido Alfani, "Economic Inequality in Northwestern Italy: A Long-Term View (Fourteenth to Eighteenth Centuries)," Journal of Economic History 75, no. 4 (2015): 1058-96; and Guido Alfani and Francesco Ammannati, "Long-term Trends in Economic Inequality: The Case of the Florentine State, c. 1300-1800," Economic History Review 70, no. 4 (2017): 1072-102; on Sweden, see Erik Bengtsson et al., "Wealth Inequality in Sweden, 1750-1900," Economic History Review 71, no. 3 (2018): 772-94, and Erik Bengtsson and Patrick Svensson, "The Wealth of the Swedish Peasant Farmer Class (1750-1900): Composition and Distribution," Rural History 30, no. 2 (2019): 129-45; on Norway, see Jørgen Modalsli, "The Regional Dispersion of Income Inequality in Nineteenth-century Norway," Explorations in Economic History 67 (2018): 62-79. So far, the zenith of this historiographical current has been the recent publication of Giampiero Nigro, ed., Disuguaglianza economica nelle società preindustriali: Cause ed effetti/Economic Inequality in Pre-industrial Societies: Causes and Effects (Firenze: Firenze University Press, 2020), which includes numerous additional case

reliable quantitative information on the distribution and exploitation of landed property in nineteenth-century Greece, owing to the nonexistence of cadastral or tax records, is the most prominent obstacle that all research on rural inequality faces. The first systematic compilation by the Greek state of basic agricultural statistics at the provincial level was only made in 1860,4 while the first modern agricultural census with published results for each settlement had to wait until 1911. Even this body of data though, as valuable as it is for the study of the rural economy of a particular district or village, with all the necessary reservations as to the reliability of the records, does not provide information on the size of the holdings nor does it allow us to hypothesise as to the social structure within the rural community. Faced with the lack of a cadastre, the few scholars who have recently shown an interest in measuring rural inequality in nineteenthcentury Greece have resorted to flawed alternatives, such as using as a proxy for unequal access to land the share of the population who self-identified as proprietors ( $\kappa \tau \eta \mu \alpha \tau i \epsilon \zeta$ ) when asked about their profession during the national population censuses.<sup>6</sup> Available assessments of the value and income of real estate properties, such as rolls of potential borrowers compiled by local branches of the National Bank of Greece or lists of citizens eligible for jury duty composed by state authorities, do not pretend to record more than a small affluent fraction of the population that owned extensive properties; therefore, they cannot provide a basis for quantifying social stratification in nineteenth-century Greece, despite claims to the contrary.<sup>7</sup>

This is particularly unfortunate, as Greek historiography since the 1970s has emphasised the predominant character of family peasant ownership as

studies on Italy, Spain, the Polish-Lithuanian Commonwealth, Germany, the Low Countries and Ottoman Anatolia.

<sup>&</sup>lt;sup>4</sup> Public Economics Bureau, Στατιστική της γεωργίας (Athens: Ethniko Typografeio, 1864); Socrates D. Petmezas, Η ελληνική αγροτική οικονομία κατά τον 19ο αιώνα: Η περιφερειακή διάσταση (Heraklion: Crete University Press, 2003).

<sup>&</sup>lt;sup>5</sup> Directorate of Statistics, Ministry of National Economy, Γεωργική απογραφή του έτους 1911 (Athens: Ethniko Typografeio, 1914–1915).

<sup>&</sup>lt;sup>6</sup> Tryfonas Lemontzoglou, "Access to Land, the Agriculture Trap, and Literacy: Evidence from Late Nineteenth-Century Greece," *Journal of European Economic History*, 49 (2020): 11–53. Cf. Christos Hadziiossif, "Class Structure and Class Antagonism in Late Nineteenth-Century Greece," in *Greek Society in the Making, 1863–1913: Realities, Symbols and Visions*, ed. Philip Carabott (Aldershot: Ashgate Variorum, 1997), 3–17, and Stavroula A. Verrarou, "Από τον κτηματία στον αγρότη: Οικονομικοί και κοινωνικοί μετασχηματισμοί στην επαρχία Τριφυλίας το 19ο αιώνα" (PhD diss., Crete University, 2014), esp. 126–31.

 $<sup>^7</sup>$  Cf. Giorgos N. Mitrofanis, "Οι αιρέσιμοι πολίτες: Ποσοτική προσέγγιση της κοινωνικής διαστρωμάτωσης στην Ελλάδα του 1860," Μνήμων 18 (1996): 23–60. For an example of

the feature that foremost differentiated nineteenth-century Greece from other contemporary rural societies in Europe. According to this thesis, during Ottoman rule peasant households (hanes) cultivated lots of more or less similar size (known in Turkish as *çifts* or *çiftliks*, and in Greek as ζευγάρια), sufficient for the subsistence of their members; even when powerful Muslims managed to transform whole domains into large, quasi-private properties (also called, rather confusingly, ciftliks), the peasant household remained the basic unit of agricultural production and the landowners had to content themselves with part of the harvest, without interfering in farm management themselves.8 After the Greek Revolution of 1821, the revolutionary authorities, while respecting and enhancing ownership claims by Greeks (which, according to this view, it should be remembered, pertained almost exclusively to small holdings), nationalised all properties held by Muslims and allowed the Greek peasants who previously cultivated them to continue as tenants unbothered, with the obligation to pay a share of their produce to the treasury. By nationalising large tracts of land, the argument goes, the Greek state prevented wealthy elites from acquiring properties of significant value and transforming themselves into a class of large landowners. The culmination of this policy was the so-called "first land reform" of 1871, a series of laws that allowed farmers who cultivated state land to formally acquire it for a small sum, thus transforming virtually all heads of peasant families in Greece into independent smallholders and ensuring, as one scholar put it, "an almost 'idyllic' political and class tranquillity". Proponents of this thesis tended to treat the prevalence of small family-owned peasant farms as the root cause of a wide range of different long-term processes: the underdevelopment of capitalistic relations in the rural countryside, the turn of traditional regional elites to politics, the building of a "hypertrophic" state apparatus, the introduction of universal suffrage, democratic stability, urbanisation, industrial stagnation and so on.9

Although nowadays most of these causal links are considered shaky at best, the vast majority of Greek historians readily accept the view that rural

such an approach, see Stathis Koutrouvidis, "Γενόμενος κάτοχος απεράτων καλλιεργησίμων εκτάσεων...": Η συγκρότηση της αστικής τάξης στην επαρχία Πατρών κατά τον 19ο αιώνα (Athens: Smili, 2021), 230–84.

<sup>&</sup>lt;sup>8</sup> On the so-called çift-hane system, see Halil Inalcik, "The Ottoman State: Economy and Society, 1300–1600," in *An Economic and Social History of the Ottoman Empire*, ed. Halil Inalcik with Donald Quataert (Cambridge: Cambridge University Press, 1994), 143–54; on its application in the southern Balkans, see the various books and articles by the influential Greek historian Spyros Asdrachas.

<sup>&</sup>lt;sup>9</sup> Konstantinos Tsoukalas, Κοινωνική ανάπτυξη και κράτος: Η συγκρότηση του δημόσιου χώρου στην Ελλάδα (Athens: Themelio, 1981), 181–200, 263–321; the quotation is from

Greece has consistently been a society of smallholder farmers with no marked inequalities. As it has been correctly pointed out, this near unanimity is based on no statistical evidence; some historians have questioned the prevailing wisdom on the prevalence of small family farms, but the evidence they brought forward, given the aforementioned lack of statistical data on the size of land holdings, remains mostly anecdotal and refers exclusively to the cash crop zone of the western Peloponnese, where capitalistic relations were far stronger. 10 Recent histories of modern Greece have also laid much less emphasis on family peasant ownership. 11 These are welcome developments, as, although there is little doubt that land ownership in nineteenth-century Greece was, generally speaking, highly fragmented, the criticism that the prevailing historiographical consensus grossly underestimates the extent and social importance of large landed estates is well grounded. 12 That said, without a degree of quantification this general remark is of limited value in itself; even what constitutes a "small" or a "large" property needs clarification. Land distribution and its social impact can only be studied in relation to its immediate context, as it is highly dependent on the local interplay of a variety of factors, such as land value and income, crops cultivated<sup>13</sup> and, most importantly, power relations that determine land use. Conversely, small ownership, no matter how defined, does not necessarily go hand in hand

<sup>321.</sup> See also his older book, originally published in 1977: Εξάρτηση και αναπαραγωγή: Ο κοινωνικός ρόλος των εκπαιδευτικών μηχανισμών στην Ελλάδα (1830–1922), trans. Ioanna Petropoulou and Konstantinos Tsoukalas, 6th ed. (Athens: Themelio, 2006). On peasant families and peasant economy in nineteenth-century Greece, see Dimitris K. Psychogios, Προίκες, φόροι, σταφίδα και ψωμί: Οικονομία και οικογένεια στην αγροτική Ελλάδα του 19ου αιώνα (Athens: National Centre for Social Research, 1987). For a modern, high-quality history of modern Greece in which small farmers feature prominently (and positively), see George B. Dertilis, Ιστορία του Ελληνικού Κράτους, 8th ed. (Heraklion: Crete University Press, 2014). For a recent appraisal of the importance attached to small ownership in Greek historiography, see Nikos Potamianos, "Μικρή ιδιοκτησία και μικρή επιχείρηση στις νέες αφηγήσεις για την ιστορία της Ελλάδας του 19ου και του 20ού αιώνα," Τα Ιστορικά 75 (October 2022): 144–62.

<sup>&</sup>lt;sup>10</sup> Hadziiossif, "Class Structure and Class Antagonism," 3–17; Stavroula Verrarou, "Ownership and Labour in Rural Greece during the Nineteenth Century," in *Labour History in the Semi-periphery: Southern Europe, 19th–20th Centuries*, ed. Leda Papastefanaki and Nikos Potamianos (Berlin: De Gruyter Oldenbourg, 2021), 41–60. The quick expansion of currant cultivation during the nineteenth century transformed the western Peloponnese into a large zone of commercial farming par excellence.

<sup>11</sup> Potamianos, "Μικρή ιδιοκτησία και μικρή επιχείρηση."

<sup>&</sup>lt;sup>12</sup> See also Sakis Dimitriadis, "Η μεγάλη γαιοκτησία στην Παλαιά Ελλάδα, 1821–1910," in *Ιστορία της ελληνικής γεωργίας*, ed. Evi Karouzou (forthcoming).

<sup>&</sup>lt;sup>13</sup> On this specific point, see the quotation provided by Verrarou, "Ownership and Labour," 48.

with social equality, as attested by multiple historians who have studied real estate property rolls from the Ottoman era, compiled for fiscal reasons by state or communal authorities. <sup>14</sup> Thus, a shift of focus from land ownership to rural inequality would greatly enhance our understanding of nineteenth-century Greece. If we are to move beyond sweeping assertions and impressionistic accounts, the need for specific statistical data on the distribution of landed property, of good enough quality to permit interregional and international comparisons, is clear.

The recent discovery, at the General State Archives of Greece, of a large body of statistical data collected during the rule of Governor Ioannis Kapodistrias (1828–1831)<sup>15</sup> holds the potential to shed light on land ownership, agricultural production and household income and, ultimately, rural social stratification in Greece at the end of the Greek Revolution; to an extent, the same material can also be used to address other critical issues in the study of postindependence Greek agriculture, such as land use, crop rotation, crop yields and even landscape history. The property rolls in question were composed in early 1830, as part of an agricultural census undertaken in all territories controlled by the Greek government (chiefly the Peloponnese and western Central Greece) with a view to collecting the information on land tenure and agricultural production necessary for the tax reform and abolition of the tithe. Although the whole process was planned and coordinated by central state authorities, the rather decentralised way in which it was executed - data was collected by ad hoc committees of local notables, appointed directly by the government – and the lack of institutional experience meant that the returns from different provinces, and sometimes

<sup>14</sup> As Spyros I. Asdrachas succinctly put it in his study of the distribution of landed property on the island of Patmos in 1676, "land inequality does not lose its economic and social significance [simply] because it is based on holdings of small dimensions". See "Κατακερματισμός της αγροτικής ιδιοκτησίας: Το παράδειγμα της Πάτμου," *Ο Ερανιστής* 17 (1981): 8. Socrates D. Petmezas similarly concluded that in the village of Zagora in Pelion, Thessaly, a community of "small and medium proprietors ... the small size of the exploitations hides mighty inequalities in the division of the land" in the early nineteenth century. See "Recherches sur l'économie et les finances des villages du Pélion, région d'industries rurales, ca 1750–1850" (PhD diss., École des hautes études en sciences sociales, 1989), 570. Cf. Evangelia Balta and Maria Spiliotopoulou, "Εγγεια ιδιοκτησία και φορολογική απαίτηση στη Σαντορίνη τον 17ο αιώνα," *Μνήμων* 18 (1996): 117. Petmezas, who has attempted a more systematic analysis of quantitative data on the division of property in Zagora in order to study social stratification, has calculated a Gini coefficient of 0.547 (in 1836) and 0.511 (circa 1854). In "Recherches," 581, the numbers given refer to gross agricultural revenue.

<sup>&</sup>lt;sup>15</sup> The formal title of Kapodistrias, who was elected as head of state in 1827, was "Governor" (Kvβερvήτης); in most studies in English it is construed as "President".

even from different villages of the same province, varied greatly in quality, despite efforts to ensure a degree of standardisation. <sup>16</sup> The property rolls from the Peloponnese are, generally speaking, of superior quality compared to the ones from western Central Greece, owing to the rather feeble control that state authorities had been able to establish over the latter region. <sup>17</sup> These differences notwithstanding, the structure of all the manuscript property rolls I have been able to locate is essentially the same: assets possessed (including fields, vines, olive trees, mulberry trees, etc.), their location and their agricultural production or monetary income are registered for each person owning private properties or being in possession of national estates. According to the instructions of a government directive issued in December 1829, <sup>18</sup> production or income from any private or national property was to be estimated on the basis of the average annual yields reported in the previous two years (1828, 1829). No attempt to record nonagricultural assets (such as houses, workshops, or animals) and any income extracted from them was made.

To my knowledge, these registers are essentially unknown, as only the detailed census returns for the provinces of Nafpaktos and Venetiko, in western Central Greece, have been published in full in a local history journal, without any commentary or contextual information that would allow the reader to understand its nature and significance. <sup>19</sup> However, researchers are quite familiar

<sup>16 &</sup>quot;Ο Κυβερνήτης της Ελλάδος προς τους κατά την Επικράτειαν Εκτάκτους Επιτρόπους και Προσωρινούς Διοικητάς," Γενική Εφημερίς της Ελλάδος, 8 January 1830. In order to homogenise the data collection process, the central administration prepared a special registration form to be used in every province. On the efforts of the Kapodistrias administration to establish a land cadastre, see George Kalpadakis, "Θεσμική συγκρότηση του νεοελληνικού κράτους: Το σχέδιο για την γενική απογραφή γαιών (1831) και το ατέλεστο καποδιστριακό κτηματολόγιο," in Ιωάννης Καποδίστριας: Διεθνείς, θεσμικές και πολιτικές προσεγγίσεις, 1800–1831, ed. Anastasia Samara-Krispi, Sofia K. Moraiti and Stelios A. Aleifantis (Athens: Kastalia, 2021), 229–45; on its broader interest in statistics as a tool of government, see Nikos Andriotis, "Ένα υπόμνημα του 1829 περί στατιστικής: Καταβολές και επιδράσεις," Μνήμων 18 (1996): 181–90 and, especially, Giannis Bafounis, Στατιστική και πλάνη είναι λέξεις συνώνυμοι... Η ελληνική στατιστική τον 19ο αιώνα (Athens: Etaireia Meletis Neou Ellinismou, 2006), 21–28.

<sup>&</sup>lt;sup>17</sup> The Peloponnese had consistently been the political centre of the Greek Revolution since 1821; on the contrary, western Central Greece, a region forever somewhat impervious to the jurisdiction of the central revolutionary authorities, had only recently returned to Greek rule, after being under Ottoman control for a three-year period (1826–1829).

<sup>&</sup>lt;sup>18</sup> Published in the official gazette; see n. 16.

<sup>&</sup>lt;sup>19</sup> Christos K. Reppas, "Συμβολή στη ναυπακτιακή ιστορία: Ιστορικά έγγραφα της περιόδου 1825–1830," Ναυπακτιακά 2 (1984–85): 259–79. The original records are kept at General State Archives of Greece (GAK), Vlachogiannis Collection, Catalogue C, file 7, doc.

with the land survey itself, as its summary results have been published twice: initially at the province level, by Eleni Belia in 1978–1979, and then for each village, by Kostas Kostis in 1987.20 If we compare the extended manuscript property rolls with the summary tables for each province and village compiled by the Kapodistrias administration and published by Belia and Kostis, three main differences become apparent - apart from the expected numerical discrepancies, that is. Firstly, the commission established by Kapodistrias to process the data from all over the territory deemed each entry, which according to the logic behind the census corresponded to an owner, as belonging to a "family". Identifying owners with heads of families is not without its problems, as we shall see; this equation confirms though that the peasant family generally functioned as the basic productive unit, as suggested by other contemporary sources, and it should probably be accepted in principle as plausible for most of the cases. Secondly, monasteries, which in the original registers were treated as appertaining to nearby settlements, in the summary tables came to be regarded as separate entities, independent of villages; since, as we shall see, monastic properties were major drivers of rural social inequality, the manner in which they are handled is very consequential. Thirdly, summary tables lack any reference to agricultural production. This omission is rather paradoxical, as the aforementioned government directive makes clear that one of the main objectives of the land survey was precisely the collection of information on production and income. It is possible that the government anticipated difficulties in managing data using a wide variety of different weights and measures, or entertained serious doubts about the accuracy of the estimates for production and income.21

Given that the manuscript property rolls in question and the summary tables are products of the same census, it is obvious that the scepticism over the reliability of the latter also applies to the former. The commission put in charge of the raw data compilation castigated the survey, highlighting a number of problems that marred the process from the beginning. Some of the complications,

<sup>63–87;</sup> the census results for Nafpaktos and Venetiko are of much inferior quality than those of the two provinces that are analysed in this article.

<sup>&</sup>lt;sup>20</sup> Eleni D. Belia, "Στατιστικά του ελληνικού κράτους κατά το 1830," Μνημοσύνη 7 (1978–1979): 291–319; Kostas Kostis, ed., "Στατιστικαί Παρατηρήσεις 1828, 1829 και 1830," in Αρχείον Ιωάννου Καποδίστρια, ed. Kostas Dafnis, vol. 8 (Corfu: Society of Corfiot Studies, 1987): 105–335.

<sup>&</sup>lt;sup>21</sup> See the instructions to the commission tasked with compiling the aggregate statistics, in *Αρχεία της Ελληνικής Παλιγγενεσίας*, ed. Agamemnon Tselikas, vol. 21 (Athens: Hellenic Parliament Library, 2008), 64–65.

such as differences in the units of measurement used or duplicate entries of persons who possessed assets in more than one village or more than one province, were a direct consequence of the decentralised data collection. Other criticisms, such as the fact that local committees recorded only lands that were potentially productive, are indicative of the unrealistic expectations of the bureaucrats, who questioned why the total of all lands recorded in the Peloponnese "barely equals one-tenth of the surface area of the Peloponnese according to geographers". There is little doubt that many farmers underreported the assets they possessed, whether due to deliberate evasion or because the authorities failed to reach part of the population, but this particular survey is hardly exceptional in this regard. Although some historians, echoing the commission's criticisms, have dismissed the census summary results as unreliable,22 the close study of the original property rolls shows that these problems are highly overstated. Duplicate entries are in fact very rare and most local committees made a sincere effort to record every single possession, no matter how insignificant (for instance, owners with only a couple of olive trees), as long as it was judged to be of potential economic interest to the state; if they failed to record most of the land, it was because they considered it unfit for agricultural use. Despite the inconsistencies in how different local committees interpreted government instructions, the property rolls for the provinces of the Peloponnese, at the very least, are quite reliable and provide the only known quantitative source on the distribution of landed property in nineteenth-century Greece.

In order to better illustrate this point, a sample encompassing 12 settlements from two different provinces of the southern Peloponnese will be used, comprising 1,135 entries in total. The first part of the sample (582 entries), drawn from the mountainous province of Agios Petros (modern North Kynouria), consists of four settlements (Agios Ioannis, Meligou, Platanos and Korakovouni), including their dependencies and numerous monasteries lying within their limits (Map 1); the sample corresponds to the area included, after the 1835 administrative reform, in the municipalities (local self-governing districts,  $\delta\dot{\eta}\mu oi$ ) of Thyrea and Platanous, as well as a large part of the territory of the neighbouring municipality of Vrasies. The second part of the sample

<sup>&</sup>lt;sup>22</sup> Kostis, "Στατιστικαί Παρατηρήσεις," 117. Cf. Giorgos N. Mitrofanis, "Φορολογικό και γαιοκτητικό καθεστώς της ελαιοκαλλιέργειας στο Ελληνικό Κράτος (1821–1860)," Τα Ιστορικά 20 (June 1994): 94–96, as well as Bafounis, Στατιστική και πλάνη, 27, and, especially, Simos Bozikis, Ελληνική Επανάσταση και Δημόσια Οικονομία: Η συγκρότηση του ελληνικού εθνικού κράτους, 1821–1832 (Athens: Asini, 2020): 369–70, n. 120. Interestingly, Bozikis uses without reservations quantitative data on cultivated land in the province of Karytaina in 1829 (see 371), for which similar misgivings as to their reliability were voiced by the authorities.

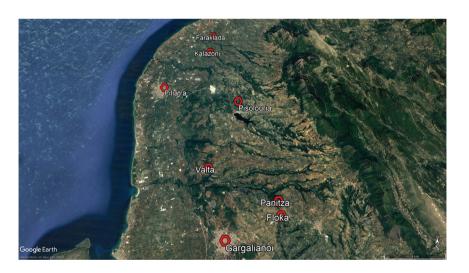
(553 entries), is centred on two large lowland villages (Gargalianoi, Filiatra) in the province of Arkadiá (modern Trifyllia) and six tiny settlements in their vicinity (Pisolouria, Kalazoni, Faraklada, Floka, Panitza, Valta) (Map 2); it is essentially coterminous with the post-1835 municipalities of Platamodis and Erani.<sup>23</sup> Although the main reason for selecting these particular settlements is the high quality of their corresponding property rolls, it should be noted that the sample includes a large variety of settlements in terms of size, geography, main products, ownership status (whether consisting of private or national properties), prosperity and population mobility (whether their population was sedentary or tended to move seasonally to another location). Thus, it might be considered broadly representative of a number of different conditions under which the rural population of the Peloponnese made a living as a whole and, most importantly, offers the opportunity to examine whether the aforementioned factors had any effect on social inequality. An additional reason for the inclusion of Arkadiá in the sample is that it is without doubt the best-studied rural region of the Peloponnese, with multiple studies of its agricultural economy over two centuries, spanning both Ottoman rule and the postindependence period.<sup>24</sup>

<sup>&</sup>lt;sup>23</sup> The corresponding property rolls are held at GAK, Revolutionary and Kapodistrian Period Ledgers and Protocols, doc. 171–72, 174, 216–17, and n. 766. On the municipalities established in 1835 in the two regions, see Eleftherios G. Skiadas,  $I\sigma\tau o\rho\iota\kappa \delta$  διάγραμμα  $\tau\omega v$  δήμων της Ελλάδος, 1833–1912: Σχηματισμός – σύσταση – εξέλιξη – πληθυσμός – εμβλήματα, rev. ed. (Athens: Mikros Romios, 1994), 320ff., 356ff. The province of Arkadiá, since renamed Trifyllia (current capital city: Kyparissia), in the southeastern Peloponnese, is different from the modern (and ancient) Arcadia, which is located in the centre of the peninsula (current capital city: Tripoli).

<sup>&</sup>lt;sup>24</sup> Stefka Parveva, "Agrarian Land and Harvest in South-West Peloponnese in the Early 18th Century," Études balkaniques 39 (2003): 1, 83–123; Parveva, "The Influence of the Market on the Urban Agrarian Space: The Case of the Town of Arcadia in 1716," *Oriente Moderno*, n.s., 25 (86) (2006): 21–49; Parveva, "Agrarian Surplus and Agrarian Strategies in the Village Micro-Economy in the South-West Peloponnese in the Early Eighteenth Century," in *Ottoman Rural Societies and Economies. Halcyon Days in Crete VIII: A Symposium Held in Rethymno*, 13–15 January 2012, ed. Elias Kolovos (Rethymno: Institute for Mediterranean Studies; Crete University Press, 2015), 65–94; Verrarou, "Από τον κτηματία."



Map 1. Sampled communities of Agios Petros province (background courtesy of Google Earth)



Map 2. Sampled communities of Arkadiá province (background courtesy of Google Earth)<sup>25</sup>

 $<sup>^{25}</sup>$  I am grateful to Michael Festas for providing me with the exact coordinates of Pisolouria and Panitza, two villages that were abandoned in the nineteenth century.

Apart from a few individual entries which record properties owned by monasteries, village churches and schools, most refer to natural persons. As already noted, the commission established by the Kapodistrias administration to process the data equated entries originally signifying owners with heads of families. However, this does not appear to have been always the case; and even if it were, the prevailing family type in nineteenth-century Greece has been open to debate.<sup>26</sup> A number of entries list properties jointly owned by siblings, cousins or other relatives, presumably after having inherited them from a deceased ancestor; sometimes, though, no obvious relation between the co-owners of an asset can be ascertained. It is apparent that joint property ownership, whether between relatives or not, does not necessarily signify a joint household. Nevertheless, joint properties are relatively few, so it is probably safe to assume that in most cases entries/owners should be identified with heads of households, if not families. A particularly challenging issue, pertaining mostly to the property roll of Filiatra, is the existence of a few duplicate entries of individuals with single ownership of some assets and joint ownership of others; unfortunately, the available information does not allow for a division of these jointly owned properties among the individuals concerned, as the details on co-owners involved are usually very vague. As many of the joint properties concerned uncultivated fields, though, measuring income inequality should be more serviceable than measuring wealth inequality in this particular village.

Another problem, common to many studies using property rolls as a source for studying income inequality, is what to do with propertyless farmers. As the local committees were asked to record any type of agrarian property that could yield an income, even if unexploited at that time, it is reasonable to assume that heads of households who neither owned any real property at all nor possessed any national estates were not recorded. However, the local committee assigned to survey one of the sampled villages, Korakovouni, deviated from government instructions and recorded even heads of households without any property capable of generating income: out of a total of 125 entries, 13 refer to "owners" without any assets at all. For four of them it is clearly stated that their properties were included in different entries, usually of their relatives ("[his properties]

<sup>&</sup>lt;sup>26</sup> Compare, for example, Vasilis Panagiotopoulos, "Μέγεθος και σύνθεση της οικογένειας στην Πελοπόννησο γύρω στα 1700," Τα Ιστορικά 1 (September 1983): 5–18, with Psychogios, Προίκες, φόροι, σταφίδα και ψωμί, 97–112.

<sup>&</sup>lt;sup>27</sup> Cf. Alfani, "Economic Inequality," 1076–77; Alfani and Ammannati, "Long-term Trends," 1092–95; Guido Alfani, "Economic Inequality in Preindustrial Europe, 1300–1800: Methods and Results from the EINITE Project," in Nigro, *Disuguaglianza economica/ Economic Inequality*, 24.

were registered together with his brother-in-law's", "his private properties were registered together with his son-in-law's", "[his properties] were registered in his creditors' [entry]", etc.). However, for nine "owners" (or 7.2 percent of the settlement's total entries) it is clearly stated that they did not own any assets, making data from this particular settlement not completely comparable to those from the other property rolls. I shall return to this problem later.

In the interests of brevity and simplicity, the six small settlements of Arkadiá (namely Pisolouria, Kalazoni, Faraklada, Floka, Panitza, Valta), each of which had between 6 and 15 entries or owners, will be treated as a whole. Besides their small size, which makes fruitless any attempt to study inequality in the interior of each village separately, and their geographical proximity, there are other good reasons for this choice. The six hamlets had identical ownership status, distinct from the rest of the sample, as all the real properties therein are "national"; their agricultural profile was also identical, since the near-exclusive source of agricultural income for their population, according to the survey, was cereal production. We have to assume that these hamlets, characterised by low population density and land-extensive grain farming, were formerly large landed estates (*ciftliks*) belonging to Muslim landowners, which were nationalised after the Greek Revolution.

When examining land uses and incomes recorded in the sampled communities (Tables 1, 2 and 4), key differences in their agricultural profile become apparent. As a general rule, peasants in the southern Peloponnese relied for their subsistence on a typical Mediterranean mix of annual crops, wine production and olive cultivation. However, crop diversification was far more prevalent in the four mountainous villages of the province of Agios Petros than in the lowlands of Arkadiá. In the former, due to inadequate land available in the village proper, as well as the need for winter pastures for animal husbandry, the population of Agios Ioannis, Meligou and Korakovouni spent the winter months at seasonal settlements (called  $\kappa \alpha \lambda \dot{\nu} \beta \iota \alpha$ , literally "huts") in the low-lying flatlands of Astros, dependent on the highland principal communities (Map 1); properties owned in the plains were included in the assets recorded by the survey, thus the numbers recorded do not do justice to land scarcity in the highlands.<sup>29</sup> Interestingly, the inhabitants of the other

<sup>&</sup>lt;sup>28</sup> On the ecological constraints on Mediterranean agriculture and human adaptations to them, see Peregrine Horden and Nicholas Purcell, *The Corrupting Sea: A Study of Mediterranean History* (Oxford: Blackwell, 2000), esp. 173ff.

<sup>&</sup>lt;sup>29</sup> William Martin Leake, *Travels in the Morea* (London: John Murray, 1830), 2:483–86, 494–95, 510. Seasonal migration to lowland  $\kappa \alpha \lambda \dot{\nu} \beta \iota \alpha$  was a widespread arrangement among mountainous villages in the Peloponnese; the map of the peninsula produced by the French

sampled village of the province, Platanos, did not ascribe to this arrangement. The main reason for their permanent residence in the highlands is ecological: in Platanos, a settlement even today renowned for the abundance of its waters, a large part of the arable land inside the community limits was irrigated, allowing for a much better balance between winter and spring grain crops. Notably, the population of Platanos had apparently specialised in onion farming, the yields of which amounted to more than 20 percent of its total agricultural income (table 4); from the quantities produced annually (70 tonnes), it is obvious that it was produce destined for the market. Furthermore, water resources permitted a greater emphasis on fruit tree farming, although the main cultivation in that regard, figs, does not require too much water.<sup>30</sup> The significance of fig cultivation for the subsistence of Mediterranean rural households is already well established.<sup>31</sup> Not only did fruit trees serve as an additional source of income, but their yields, together with revenues from vegetable gardens, were also the only type of agricultural income recorded in monetary values – thus hinting at their function as cash crops in a mostly subsistence agriculture.32

Scientific Expedition in 1829–32 portrays 101 καλύβια in total. See "Η Γαλλική επιστημονική αποστολή του Μοριά, 1829," Institute of Historical Research of the National Hellenic Research Foundation, accessed 22 November 2022, https://moree1829.gr/.

<sup>&</sup>lt;sup>30</sup> Figs were considered to be the principal produce of the village by Leake, when he visited it in 1806, noting that they were "dried and sold all over the Morea"; nevertheless, he assessed them as being of inferior quality. See *Travels*, 2:502–3.

<sup>&</sup>lt;sup>31</sup> Horden and Purcell, *Corrupting Sea*, 210. Cf. Elias Kolovos, Όπου ην κήπος: Η μεσογειακή νησιωτική οικονομία της Άνδρου σύμφωνα με το οθωμανικό κτηματολόγιο του 1670 (Heraklion: Crete University Press; Kaireios Library, 2017), 36–37.

<sup>&</sup>lt;sup>32</sup> Cf. the case of the market-oriented vegetable cultivation in Argos, which has been treated as an example of a successful integration of peasantry into capitalism: Evi Karouzou, *Les jardins de la Méditerranée: Agriculture et société dans la Grèce du Sud*, 1860–1910 (Athens: Modern Greek History Research Centre of the Academy of Athens, 2014).

Table 1. Land uses in the 12 sampled communities (sums of individual entries, irrespective of ownership status, in dönüms/stremmata)

|                                   | Totals                                   | 8,760.75         | 1,439.75 | 1,267    | 1,892       | 8,008.5  | 5,535.75    | 7,014                   |
|-----------------------------------|--|------------------|----------|----------|-------------|----------|-------------|-------------------------|
| imedd                             | unclaimed<br>"national"<br>vines         | 0                | 0        | 0        | 0           | 236      | 0           | 10                      |
| Unoccupied/unclaimedd             | suitable<br>for<br>currants              | 0                | 0        | 0        | 0           | 0        | 2,506       | 3,300                   |
| Unoccu                            | uncultivated                             | 0                | 0        | 0        | 0           | 3,129    | 0           | 2,649                   |
|                                   | Currants                                 | 0                | 0        | 0        | 0           | 104      | 3           | 0                       |
|                                   | Vines                                    | 1346             | 371.75   | 245.25   | 366.5       | 2,090.5  | 1,268.75    | 08                      |
|                                   | and<br>vegetable<br>gardens <sup>b</sup> | 18               | 5.5      | īC       | 0           | 0        | 0           | 0                       |
| Irrigated grain and cotton fields | uncultivated<br>fields                   | 33               | 0        | 12       | 0           | 70       | 7.5         | 15.5                    |
| in and co                         | for the<br>next<br>season                | 0                | 0        | 15.5     | 0           | 0        | 0           | 0                       |
| ated grai                         | with<br>spring<br>grain<br>crops         | 103.5            | 0        | 233.75   | 0           | 25       | 29          | 223                     |
| Irrig                             | with<br>winter<br>grain<br>crops         | 2                | 0        | 0        | 0           | 0        | 0           | 19                      |
| fields                            | uncultivated<br>fields                   | 3,001.5          | 384.75   | 275.75   | 932.25      | 2,234.5  | 1,430       | 189                     |
| nd cotton                         | for the<br>next<br>season                | 962              | 111.75   | 92.75    | 237.75      | 0        | 0           | 0                       |
| Dry grain and cotton fields       | with<br>spring<br>grain<br>crops         | 1,074.5          | 128      | 96.75    | 77          | 37.5     | 47.5        | 3                       |
| Dr                                | with<br>winter<br>grain<br>crops         | 2,220.25         | 438      | 290.25   | 278.5       | 82       | 244         | 525.5                   |
|                                   | Number<br>of entries                     | 252              | 94       | 111      | 125ª        | 302      | 183         | 89                      |
|                                   | Village                                  | Agios<br>Ioannis | Meligou  | Platanos | Korakovouni | Filiatra | Gargalianoi | 6 "national"<br>hamlets |
|                                   | Province                                 |                  | Agios    | retros   |             |          | Arkadiá     |                         |

Notes a Includes 13 entries without any assets at all.

 $<sup>^{\</sup>rm b}$  When recorded separately. For most of the owners enclosures were included in the fields owned.

<sup>°</sup> Whether productive or not.

<sup>&</sup>lt;sup>d</sup> Added to the village totals.

(sums of individual entries, irrespective of ownership status) Table 2. Trees recorded in the 12 sampled communities

| Number                     | Number    |   |        |         | Ë        |     |       |      | 1     | ť            | ć                 |       | Orange | Bitter | Unc    | Unclaimed "national" trees <sup>d</sup> | ional" tr | psee q |
|----------------------------|-----------|---|--------|---------|----------|-----|-------|------|-------|--------------|-------------------|-------|--------|--------|--------|---|-----------|--------|
| v mage of entries          | of entrie | S | Olive  | мшрепту | rig<br>S | Oak | wamut | rear | əiddə | Appie Cherry | Fomegranate Lemon | гешоп | trees  | orange | Olive  | Mulberry                                | Fig       | Walnut |
| Agios Ioannis 252          | 252       |   | 17,274 | 1,008   | 0        | 0   | 9     | 142  | 0     | С            | 550               | 130   | 2      | 2      | 0      | 0                                       | 0         | 0      |
| Meligou 94                 | 94        |   | 2,756  | 296     | 15       | 0   | 11    | 0    | 0     | 0            | 0                 | 0     | 0      | 0      | 0      | 0                                       | 0         | 0      |
| Platanos 111               | 111       |   | 2,776  | 321     | 1,095    | 0   | 124   | 5    | 5     | 320          | 30                | 0     | 0      | 0      | 0      | 0                                       | 0         | 0      |
| Korakovouni 125ª           | 125ª      |   | 3,384  | 83      | 0        | 0   | 2°    | 0    | 0     | 0            | 0                 | 0     | 0      | 0      | 0      | 0                                       | 0         | 0      |
| Filiatra 302               | 302       |   | 27,177 | 163°    | 13°      | 0   | 0     | 0    | 0     | 0            | 0                 | 0     | 0      | 0      | 5,916° | 4°                                      | 3°        | 0      |
| Gargalianoi 183            | 183       |   | 6,300  | .909    | 0        | 156 | 0     | 0    | 0     | 0            | 0                 | 0     | 0      | 0      | 0      | 0                                       | 0         | 0      |
| 6 "national" 68<br>hamlets | 89        |   | 319°   | 0       | 0        | 0   | 0     | 0    | 0     | 0            | 0                 | 0     | 0      | 0      | 1,017° | 45°                                     | 0         | 16     |
|                            |           |   |        |         |          |     |       |      |       |              |                   |       |        |        |        |   |           |        |

Notes a Includes 13 entries without any assets at all.

 $<sup>^{\</sup>rm b}$  Whether productive or not.  $^{\rm c}$  No income recorded for these types of trees for the villages indicated.

<sup>&</sup>lt;sup>d</sup> Added to the village totals.

If we compare agricultural land availability in the two provinces, a major difference emerges: in Agios Petros, farmland was much scarcer (22.95 stremmata per entry) than in lowland Arkadiá (37.18 stremmata per entry). There is no doubt that most of the land in Arkadiá was not used for farming; more than half of the available farmland in the eight sampled communities (57.54 percent) was not even claimed as owned or possessed in 1830, while less than one-fourth of the fields claimed were actually cultivated at the time of the survey (table 2). Given the appearance of a large cultivable plain that lay unproductive in an underpopulated district, it is not surprising that the region was designated by Kapodistrias as a possible location for the resettlement of refugees from areas under Ottoman rule. 33 In reality, the main products of the coastal plain of Arkadiá, in terms of both output value and land use, were by far olive oil and wine, 34 not annual crops: at Filiatra, almost no grains were sown. The transformation of the plain of Filiatra and Gargalianoi from an area of diversified farming into a near-monocultural vineyard and olive grove had been a relatively recent phenomenon, as demonstrated by a comparison with the picture emerging from the 1716 Ottoman land survey (table 3).<sup>35</sup> That was an adjustment driven primarily by market forces: increased demand for Greek olive oil in Western Europe for industrial use during the eighteenth century provided the incentive for the expansion of olive cultivation, <sup>36</sup> whereas converting grain fields into vineyards capitalised on the higher value of the produce of the latter. Cereal cultivation remained marginal in the decades following 1830 as well, eclipsed initially by olive and, later on, by currant

 $<sup>^{33}</sup>$  Evi Karouzou, Εθνικές γαίες, εθνικά δάνεια και εθνική κυριαρχία: Βρετανική διπλωματία και γαιοκτησία στο ελληνικό κράτος 1833–1843 (Athens: Modern Greek History Research Centre of the Academy of Athens, 2018), 153.

<sup>&</sup>lt;sup>34</sup>Cf. Leake, Travels, 1:74.

 $<sup>^{35}</sup>$  On the "complex micro-economy" of Filiatra in 1716, see Parveva, "Agrarian Surplus and Agrarian Strategies," 77–81.

<sup>&</sup>lt;sup>36</sup> On the exports of olive oil from the Peloponnese in the eighteenth century, see Vassilis Kremmydas, *Το εμπόριο της Πελοποννήσου στο 18ο αιώνα (1715–1792) (με βάση τα γαλλικά αρχεία)* (Athens: s.n., 1972), 144–57. Cf. Kremmydas, *Συγκυρία και εμπόριο στην προεπαναστατική Πελοπόννησο (1793–1821)* (Athens: Themelio, 1980), 151ff. and passim (esp. the depiction of the coastal plain of Arkadiá on the map, 154). The expansion of olive cultivation often seems to have entailed significant investment, even immediately after the war, as in the case of a certain doctor of Filiatra, named Dionysios Tzanis, who in 1830 owned 5,132 olive trees, of which 5,000 were in a *γροθομάντρι* and were not productive yet; my understanding is that these olives (amounting to 15 percent of the village total) were plants reproduced by grafting (nowadays called *γροθάρι*) in an enclosed area.

plantations.<sup>37</sup> On the contrary, the six large estates formerly belonging to Muslim landowners, which were nationalised during the revolution, were unaffected by this change by the time of the 1830 survey. The few tenants therein, having abundant dry and irrigated land at their disposal, were able to make a living by producing cereals alone, keeping vine and olive tree cultivation to a minimum (table 4).

Table 3
Types of agricultural wealth recorded by Ottoman (1716) and Greek (1830) authorities in the village of Filiatra

| Types of agricultural wealth       | Ottoman survey, 1716<br>(274 adult male inhabitants in<br>168 households) | Greek survey, 1830<br>(302 entries/property<br>owners) |
|------------------------------------|---|--|
| Grain fields (in dönüms/stremmata) | 4,026ª  | 2,449  |
| Vineyards (in dönüms/stremmata)    | 1,298   | 2,326.5  |
| Olive trees                        | 2,964   | 33,093   |
| Mulberry trees                     | 529   | 167  |
| Lemon and orange trees             | 123   | 0  |
| Fig trees                          | 163   | 16   |
| Pear and apple trees               | 51  | 0  |
| Various fruit-bearing trees        | 200   | 0  |

Note  $\,^{a}$  Based on the information that the 56 çifts lying within the limits of the village were equal to 2,783 dönüms, it has been estimated that the sum of 81 çifts cultivated by the inhabitants of Filiatra corresponds to 4,026 dönüms in total.

Sources (for the Ottoman survey): Stefka Parveva, "Agrarian Land and Harvest in South-West Peloponnese in the Early 18th Century," Études balkaniques 39 (2003): 93–94, 102; Parveva, "The Influence of the Market on the Urban Agrarian Space: The Case of the Town of Arcadia in 1716," Oriente Moderno, n.s., 25 (86) (2006): 32–33, 41; Parveva, "Agrarian Surplus and Agrarian Strategies in the Village Micro-Economy in the South-West Peloponnese in the Early Eighteenth Century," in Ottoman Rural Societies and Economies. Halcyon Days in Crete VIII: A Symposium Held in Rethymno, 13–15 January 2012, ed. Elias Kolovos (Rethymno: Institute for Mediterranean Studies; Crete University Press, 2015), 80–81.

<sup>&</sup>lt;sup>37</sup> Verrarou, "Από τον κτηματία," 205ff.

As noted above, local committees were asked to estimate the production of each type of agrarian property that yielded an income, whether private or national property, on the basis of the average annual produce reported in the previous two years (1828, 1829). For a few products, output was calculated according to a standard formula: for example, each mulberry tree in the province of Agios Petros was estimated by census takers to provide 50 dramia (about 3.2 g) of silk. However, for most types of products, yields were calculated on a case-by-case basis and thus variation in crop yields recorded should roughly reflect differences in real productivity. The distribution of most crop yields resembles somewhat the bell curve that can be anticipated from a randomly distributed variable such as yields, although it is not formally normal, due to the clear preference of census takers to round off numbers when estimating yield ratios and output. As a general rule, recorded yields are low; disturbances in agriculture caused by the war were clearly a contributing factor, but someone might be, perhaps, justified to suspect that output has been, to some extent, underestimated. It goes without saying that reported yields are in no way identical to "real" incomes of farmers/ heads of households; rather, recorded output for every asset in use should be considered as a notional income enjoyed by the respective owner, which would then be redistributed according to economic and social relations and the fiscal demands of the state. Thus, for instance, for 60 stremmata of vineyards owned by the Loukou Monastery, in Agios Ioannis, which were under emphyteutic lease, the survey listed only an annual rental income of 192 phoenixes (the official currency of Greece at the time) in the convent's entry, without any mention of the identity of the lessees or their revenues.

As a great variety of locally applied weights was used for the estimation of yields of different products,<sup>38</sup> each amount recorded has been converted to

<sup>38</sup> On the weights in use in Ottoman Greek lands and their local variations, see Dimitrios A. Petropoulos, "Συμβολή εις την έρευναν των λαϊκών μέτρων και σταθμών," Επετηρίς του Λαογραφικού Αρχείου 7 (1952): 57–101; Josef Kabrda, "Poids et mesures employés dans les sandjaks balkaniques aux XVIe et XVIIe siècles (Contricution à la métrologie ottomane)," Sborník prací Filosofické fakulty brněnské university. C, Řada historická 20 (1973): 103–30; Lijuben Berov, "Problèmes de la métrologie dans les territoires balkaniques à l'époque de la domination ottomane (XVe–XIXe SS.)," Études balkaniques 11 (1975): 2, 22–39; Halil Inalcik, "Introduction to Ottoman Metrology," Turcica 15 (1983): 311–48; Aikaterini Polymerou-Kamilaki, "Νεοελληνική μετρολογία: Παραδοσιακά μέτρα και σταθμά: εθνογραφική μελέτη" (PhD diss., National and Kapodistrian University of Athens, 1989). In line with the bibliography, I have accepted that 1 oka=1.2829 kg, 1 koilo (kile)=20 okas (on average, for both winter and spring grain crops, more delicate distinctions being unfortunately unfeasible for practical reasons), 1 pinaki=3 kiles, 1 varela=48 okas (for wine and olive oil), 1 drami=1/400 oka. As far as my sample is concerned, the main problem lies with the use by the

"kilogram grain equivalents", a unit of account often applied by economists and historians. Use of grain equivalents in this study is not intended as a yardstick to assess whether yields of a set of different agricultural products were adequate for population subsistence, as we lack data on both household size and nonfarming revenues of the persons included in the sample.<sup>39</sup> Resorting to this method

local committees assigned to survey the villages of Arkadiá of the fortoma (literally "(animal) load"), a notoriously inconsistent weight unit (see Kabrda, "Poids et mesures," 112–14, and Polymerou-Kamilaki, "Νεοελληνική μετρολογία," 213, 526–29), to measure wine production. We know that, according to an 1825 document, in Andritsaina, a town in the neighbouring province of Fanari, 1 fortoma of wine was equal to 36 botsas, or 72 okas (Χειρόγραφα ιστορικού αρχείου Βιβλιοθήκης Ανδρίτσαινας: Περίοδος 1821–1866 (Thessaloniki: Aristotle University of Thessaloniki; Andritsaina Public Library, 2010), 116); given that the average productivity of vines recorded in the sample is 1.67 fortoma/stremma, I think that this is a valid equivalent for Arkadiá as well.

<sup>39</sup> On the reasoning behind this approach, see Colin Clark and Margaret Haswell, The Economics of Subsistence Agriculture (London: Macmillan, 1964), 48-68; for an extensive discussion of it from an economic historian's point of view, see Bruce McGowan, "Food Supply and Taxation on the Middle Danube (1568–1579)," Archivum Ottomanicum 1 (1969): 139-96. It is important to note that McGowan, while accepting the method in principle, does not use the original price weights offered by Clark and Haswell; for the conversion rates used here, see Clark and Haswell, Economics, 196–97; Petmezas, Η ελληνική αγροτική οικονομία, 333–34; Kolovos, Όπου ην κήπος, 43. Assuming that most of the olives produced in the province of Agios Petros were turned into oil, I have used for them a rate of 0.750 kg grain equivalent (olive oil is equal to 3 kg wheat); had we considered them edible, a higher conversion rate would have to be used, since in the 1820s edible olives were consistently sold at about 40 percent of the price of olive oil. See the evolution of market prices in the city of Nafplion in Sakis Dimitriadis, "Η λειτουργία της αγοράς στις πόλεις της επαναστατημένης Ελλάδας: Θεσμική οργάνωση και πολιτικές της κεντρικής κυβέρνησης," in Όψεις της καθημερινότητας στην επαναστατημένη Ελλάδα, ed. Vaso Seirinidou (Athens: National and Kapodistrian University of Athens; Piraeus Bank, 2021), 100-101. For the conversion of revenues recorded in money values, given that in 1830 one oka of wheat in Nafplion costed 38 paras (an Ottoman currency with a wide circulation), or 0.38 phoenixes (GAK, Financial Committee Archive (Kapodistrian Period), file 119, unnumbered doc.), I have estimated that 1 phoenix was equal to 3.376 kg wheat. A final problem is posed by the fact that the 1830 survey for Arkadiá does not distinguish between different species of grain, opting instead for a general classification in winter and spring grain crops. By using data from the 1860 agricultural census for the province of Trifyllia, I have determined that the former were a mix of maslin  $(\sigma u u v \phi \zeta)$ or  $\sigma i \tau o \kappa \rho i \theta \eta$ , that is, a mix of wheat and barley), wheat and barley in an uneven share, with a rate of 0.858 kg grain equivalent, whereas maize undoubtedly was the main spring grain crop cultivated in the region. It should be noted that, had we used a mix based on the quantities of cereals produced in Filiatra and Gargalianoi in 1716 (Parveva, "Agrarian Surplus and Agrarian Strategies," 68-69), we would get a significantly lower rate for the winter grain crops (0.763

is simply a way to homogenise data collected by the 1830 land survey, while avoiding the use of money values for measuring output, which would be both unsuitable for the state of the agricultural economy at the time and impractical. Although the market, in the broadest sense of the term, certainly played, as already noted, a very significant role in the economic decision-making of the farmers, there is anecdotal evidence that monetary exchanges at the level of individual producers were rare at the time. <sup>40</sup> Furthermore, the currency issued by the Kapodistrias administration, the phoenix, in which some revenues were recorded in the survey, was itself a unit of account with extremely limited actual circulation, supplanted in practice in everyday exchanges by a wide variety of currencies available, with fluctuating exchange rates.

Calculating average income per entry for every village allows us to distinguish between prosperous communities (Agios Ioannis, Meligou, Platanos), where an average owner earned enough to support a family of five or more persons, and the rest. Even, however, in the most affluent village, Agios Ioannis, one-fifth of the entries reported annual farming revenues below the minimum viable income per person (about 300 kg grain equivalent) – even without taking into account the possibility of propertyless heads of households, who were not recorded by the census takers. It is obvious that a large share of the population had additional incomes from other sectors of the economy, or worked on the farms of more well-off owners. Unquestionably, livestock farming provided important revenues, as well. According to estimations provided by François Pouqueville, animal husbandry in 1814 accounted for about 7 percent of total agricultural production value in the province of Arkadiá and 20 percent in the province of Agios Petros; other data from a French consular report, pertaining to exports only between 1805 and 1809, suggest larger shares (roughly 40 percent and 25 percent of the total value of exports from the provinces of Arkadiá and Agios Petros respectively).<sup>41</sup> Although the villages of the sample were not particularly known for raising large numbers of livestock, their inhabitants were obviously involved in livestock farming. It is more probable, though, that, if we had census

kg grain equivalent). Given however, the complete transformation of the local agricultural economy between 1716 and 1830, I think it would be better to set aside the Ottoman survey.

<sup>&</sup>lt;sup>40</sup> As suggested by the telling story of the "numerous" farmers from Platanos, who in 1824 bought lentils from a merchant in Astros, paying him in olives, exchanging "one oka of lentil [for] two okas of olives" (GAK, Secretariat for Interior (Revolutionary Period), file 44, doc. 20, 43).

 $<sup>^{41}</sup>$  F.-C.-H.-L. Pouqueville, *Voyage de la Grèce*, 2nd ed. (Paris: Firmin Didot Père et Fils, 1826–1827), 6:255, 267; Eleni K. Giannakopoulou, "Το εμπόριον εις την Πελοπόννησον κατά την β΄ πενταετίαν του 19ου αιώνος," *Πελοποννησιακά* 12 (1976–1977): 136–37.

data on animal husbandry to include in the sample, social inequality would actually rise.<sup>42</sup>

After removing, for uniformity reasons, from the sample the propertyless entries from Korakovouni, we calculated a Gini coefficient of 0.60 for landownership and 0.56 for total farming income (table 5).<sup>43</sup> How do these numbers fare compared to studies of other areas? Although the southern Peloponnese in 1830 was certainly less unequal than the Low Countries, northern Italy or Sweden, it was by no means the land of harmonious equality presented by the relevant literature. In terms of income, my sample is much more unequal than central Spain in 1800 (0.47), the United States in 1850 (0.49) or rural Norway in 1868 (0.35); in terms of wealth inequality, it is close to the rural northern United States in 1860 (0.63).<sup>44</sup> The findings from the southern Peloponnese add yet one more facet to the rather heterogeneous picture emerging from recent studies on rural inequality across different parts of the Ottoman and post-Ottoman world, thus highlighting the noninstitutional causes behind it.<sup>45</sup>

But even that picture is only half the story, because my calculation has not taken into account the propertyless household heads, who were not recorded by the census takers, except for the property roll of Korakovouni; it is obvious that the "absence of the propertyless from the distribution only biases the Gini index towards greater equality", meaning that the index only serves as "a lower

<sup>&</sup>lt;sup>42</sup>Petmezas points out that in the village of Zagora inequalities in land ownership actually intensified when taking into account disparities in revenues from livestock farming. See "Recherches," 563, 580–81. There is a hint offered by the 1830 land survey pointing to the same direction: the census takers for the village of Agios Ioannis recorded a total of six sheepfolds, four of which were owned by individuals belonging to the top 10 percent of the entries, in terms of farming income.

<sup>&</sup>lt;sup>43</sup> The Gini coefficient is a measure of inequality in a set of values; a Gini index of 0 indicates absolutely equal distribution, whereas an index of 1.00 denotes maximal inequality.

<sup>&</sup>lt;sup>44</sup> Santiago-Caballero, "Income inequality," 88; Lindert and Williamson, *Unequal Gains*, 115; Modalsli, "Regional Dispersion," 69; Jeremy Atack and Fred Bateman, "The 'Egalitarian Ideal' and the Distribution of Wealth in the Northern Agricultural Community: A Backward Look," *Review of Economics and Statistics* 63 (1981): 125.

<sup>&</sup>lt;sup>45</sup> For instance, Cyprus in 1832–1833 (wealth inequality: 0.59; see Antonis Hadjikyriacou, Χερσαίο νησί: Η Μεσόγειος και η Κύπρος στην οθωμανική εποχή των Επαναστάσεων (Thessaloniki: Psifides, 2023), 206–7) and Manastir, İştip and Pirlepe in the mid-1840s (landownership inequality: 0.67, 0.48, and 0.47, respectively; see Ezgi Burcu Işıl, "Çiftliks, Landowners and Rural Producers: Class Relations in the Balkans (18th–19th centuries)" (PhD diss., Boğaziçi University, 2023), 105, 192, 271.

bound on inequality".46 Indeed, including the excluded entries shifts the Gini coefficient for Korakovouni from 0.59 (land) and 0.55 (income) to 0.64 and 0.60, respectively. Let us consider, for the sake of argument, another possible solution to this problem: if, instead of removing the propertyless household heads of Korakovouni from the sample altogether, I added a similar number of propertyless entries (7.5 percent) to the rest of the sample as well, on the assumption that their weight would be more or less equal across different communities, the Gini index for both land and income would increase by 0.03 on average (table 5).

An alternative way to measure inequality, favoured by critics of Gini coefficients such as Piketty, is to examine the share of land and farming income enjoyed by the wealthiest owners. As Table 6 shows, the top 5 percent of entries owned 36 percent of the total land and earned 28.5 percent of the total income.<sup>47</sup> Shares of the top 5 percent are hovering near averages across different villages, with a few important exceptions. At one extreme, it is clear that in the six "national" hamlets of the Arkadiá coastal plain and, less so, in Platanos, the distribution of wealth and income was much more equal. At the other extreme, the top 5 percent in Agios Ioannis owned more than four-tenths of the land and earned almost one-third of total farming revenues reported. Compared to other societies, on the basis of statistics published by Piketty and others, these are relatively high percentages and suggest that potent local landowners existed in most villages. Most were minor notables involved in agriculture. The top 5 percent of my sample included several notables who were prominent in politics, such as Matthaios Protopapa and the family of the late Panos Sarigiannis of Agios Ioannis, the Agapinos brothers of Gargalianoi, Anagnostis Spentzas and the family of the late Theodoros Skordakis of Filiatra; in fact the joint ownership by Protopapa and Sarigiannis' widow of a nearby estate (ciftlik) provides a partial explanation for an uptick in land inequality recorded in Agios Ioannis. Wealthy monasteries also formed part of these landowning elites. In fact, monastic properties were major drivers of social inequality in the province of Agios Petros, as shown in Table 5; to give an extreme example, the Monastery of Agia Triada in Meligou was responsible for a large part of the inequality in the village interior, increasing with its weight alone the Gini index for land by 0.12 and income by 0.07 (table 5).

<sup>&</sup>lt;sup>46</sup> Alfani, "Economic Inequality," 1076; Alfani and Ammannati, "Long-term Trends," 1093.

<sup>&</sup>lt;sup>47</sup> Or, if an alternative cutoff for the entire sample is chosen, under the same conditions as in Table 6, the top 1 percent entries possessed 19.7 percent of total land recorded and earned 12.4 percent of the farming income reported.

Table 4. Farming income sources in the 12 sampled communities (sums of individual entries)

|          |                         |                      | Income (in kg grain<br>equivalents) | kg grain<br>:nts)                            |                           |        | Inco          | ıme sources       | Income sources by cultivated species $(\%)^\circ$ | specie | s (%) s                           |  | Income s<br>ownership                       | Income sources by<br>ownership status (%) |
|----------|-------------------------|----------------------|-------------------------------------|--|---------------------------|--------|---------------|-------------------|---|--------|-----------------------------------|--|---|---|
| Province | Village                 | Number<br>of entries | Total income                        | Average Cereals income and per entry legumes | Cereals<br>and<br>legumes | Cotton | Cotton Onions | Wine and currants | Wine and Olives and currants olive oil            | Silk   | Valonia<br>Silk oak acorn<br>cups | Fruit trees,<br>enclosures, and<br>vegetable gardens | Private "National"<br>properties properties | "National"<br>properties                  |
|          | Agios Ioannis           | 252                  | 755,756.05                          | 2,999.03                                     | 34.6                      | 2.2    | 0             | 32.2              | 27.6  | 1.3    | 0                                 | 2.2  | 7:66  | 0.3                                       |
| Agios    | Meligou                 | 94                   | 187,616.53                          | 1,995.92                                     | 25.3                      | 2.8    | 0             | 43.9              | 24.2  | 2.4    | 0                                 | 1.3  | 100   | 0   |
| Petros   | Platanos                | 111                  | 218,543.02                          | 1,968.86                                     | 21.8                      | 1.0    | 20.7          | 24.7              | 20.0  | 2.4    | 0                                 | 9.4  | 100   | 0   |
|          | Korakovouni             | 125ª                 | 146,439.54                          | 1,307.50 <sup>b</sup>                        | 14.8                      | 4.5    | 0             | 48.0              | 31.3  | 6.0    | 0                                 | 0.4  | 100   | 0   |
|          | Filiatra                | 302                  | 412,408.99                          | 1,365.59                                     | 2.2                       | 0      | 0             | 71.8              | 26.0  | 0      | 0                                 | 0  | 6.66  | 0.1                                       |
| Arkadiá  | Gargalianoi             | 183                  | 197,276.56                          | 1,078.01                                     | 15.1                      | 2      | 0             | 61.5              | 20.9  | 0      | 0.2                               | 0  | 99.2  | 0.8                                       |
|          | 6 "national"<br>hamlets | 89                   | 101,816.20                          | 1,497.30                                     | 88.0                      | 0.2    | 0             | 11.8              | 0   | 0      | 0                                 | 0  | 0   | 100 <sup>d</sup>                          |

Notes a Includes 13 entries without any assets at all.

ber comparison purposes, the 13 entries without assets have not been taken into account; otherwise, average income per entry for Korakovouni would fall to 1171.52 kg grain equivalents.

<sup>&</sup>lt;sup>c</sup> Due to rounding, percentages might not always add up exactly to 100%.

<sup>&</sup>lt;sup>d</sup> Includes yields from privately owned vines planted by locals on "national" soil.

Table 5. Wealth and income inequality in the 12 sampled communities (Gini coefficients)

| Parameters considered         Agios Ioannis         Meligou         Platanos         Korakovouni³         Filiatra         G           Monasteries included         0.63         0.54         0.42         0.42         0.65         0.63           Monasteries excluded, 7.5% propertyless entries added         0.66         0.57         0.49         0.64         0.65           Monasteries included         0.60         0.61         0.46         0.40         0.65         0.51           Monasteries excluded         0.60         0.54         0.40         0.55         0.51           Monasteries excluded         0.55         0.47         0.38         0.53         0.51           Monasteries included, 7.5% propertyless entries added         0.63         0.47         0.38         0.53         0.51           Monasteries included, 7.5% propertyless entries added         0.63         0.65         0.47         0.38         0.53         0.51 |                   |  |               | Agios Petr | Agios Petros Province |                          |          | Arkadiá Province | rovince              |              |
|--|-------------------|--|---------------|------------|-----------------------|--------------------------|----------|------------------|----------------------|--------------|
| 0.63     0.54     0.45     0.59       0.58     0.42     0.42     0.55       0.66     0.57     0.49     0.64       0.61     0.46     0.46     0.60       0.60     0.54     0.40     0.55       0.55     0.47     0.38     0.53       0.63     0.57     0.44     0.60  | Faramen           | ers considered                         | Agios Ioannis | Meligou    | Platanos              | Korakovouni <sup>b</sup> | Filiatra | Gargalianoi      | 6 "national" hamlets | sampie totai |
| 0.58     0.42     0.42     0.55       0.66     0.57     0.49     0.64       0.61     0.46     0.46     0.60       0.60     0.54     0.40     0.55       0.55     0.47     0.38     0.53       0.63     0.57     0.44     0.60  | Monasteries inclu | ided                                   | 0.63          | 0.54       | 0.45                  | 0.59                     | 0.62     | n/a              | n/a                  | 09'0         |
| 0.66 0.57 0.49 0.64 0.61 0.46 0.46 0.60 0.60 0.54 0.40 0.55 0.55 0.47 0.38 0.53 0.63 0.57 0.44 0.60  | Monasteries excl  | papr                                   | 0.58          | 0.42       | 0.42                  | 0.55                     | 0.63     | 0.50             | 0.35                 | 0.57         |
| 0.60 0.54 0.46 0.60 0.60 0.55 0.54 0.40 0.55 0.55 0.47 0.38 0.53 0.60 0.63 0.57 0.44 0.60  | Monasteries incl  | uded, 7.5% propertyless entries added  | 0.66          | 0.57       | 0.49                  | 0.64                     | 0.65     | n/a              | n/a                  | 0.63         |
| 0.60 0.54 0.40 0.55<br>0.55 0.47 0.38 0.53<br>0.63 0.57 0.44 0.60  | Monasteries exc   | luded, 7.5% propertyless entries added | 0.61          | 0.46       | 0.46                  | 09'0                     | 0.65     | 0.53             | 0.39                 | 09.0         |
| 0.55 0.47 0.38 0.53<br>0.63 0.57 0.44 0.60   | Monasteries incl  | luded                                  | 09.0          | 0.54       | 0.40                  | 0.55                     | 0.51     | n/a              | n/a                  | 0.56         |
| 0.63 0.57 0.44 0.60  | Monasteries exc   | pəpn                                   | 0.55          | 0.47       | 0.38                  | 0.53                     | 0.51     | 0.47             | 0.35                 | 0.53         |
|  | Monasteries incl  | uded, 7.5% propertyless entries added  | 0.63          | 0.57       | 0.44                  | 09'0                     | 0.55     | n/a              | n/a                  | 0.59         |
| Monasteries excluded, 7.5% propertyless entries added 0.58 0.58 0.54 0.54  | Monasteries exc   | luded, 7.5% propertyless entries added | 0.58          | 0.50       | 0.43                  | 0.58                     | 0.54     | 0.50             | 0.40                 | 0.56         |

Notes and type of land owned or possessed (fields, vineyards, gardens etc.), whether productive or not.

 $<sup>^{\</sup>rm b}$  For Korakovouni, entries of propertyless "owners" were originally recorded in the survey.

Table 6. Share of wealth and income owned by the top 5% of entries

|               |                      | Number of | Top 50                             | % shares                             |
|---------------|----------------------|-----------|------------------------------------|--------------------------------------|
| Province      | Village name         | entries   | Share of village land<br>owned (%) | Share of village income reported (%) |
|               | Agios Ioannis        | 13        | 42.3                               | 32.6                                 |
| A mine Detmon | Meligou              | 5         | 33.4                               | 29.6                                 |
| Agios Petros  | Platanos             | 6         | 21.2                               | 17.0                                 |
|               | Korakovouni          | 6         | 30.8                               | 23.4                                 |
|               | Filiatra             | 15        | 38.0                               | 26.7                                 |
| Arkadiá       | Gargalianoi          | 9         | 22.1                               | 22.0                                 |
|               | 6 "national" hamlets | 3         | 11.5                               | 10.0                                 |
| Sa            | mple total           | 56        | 36.0                               | 28.4                                 |

Note Percentages refer to the top entries for each village and the entire sample, monasteries included, after excluding the propertyless entries of Korakovouni.

The significant differences in social inequality in the interior of different villages, revealed by Tables 5 and 6, call for an expansion of research to additional samples, drawn from multiple regions. However, some initial suggestions of potentially broader interest might be made, even though their provisional character cannot be emphasised enough. It seems that the availability of "national" lands had really the potential to act as the social equaliser it is often assumed it was, but under specific conditions (low population density, grain monoculture) that are essentially particular to former large landed estates (*ciftliks*); where social conditions did not allow its cultivation and it was left barren, as in Filiatra, its impact on inequality was negligible. The case of Platanos strongly implies that the diversification of farming income sources and a focus on tree cultivation might lead to a reduction of inequality, but it is important to bear in mind that irrigated lands in Mediterranean agriculture were normally quite rare. The case of monocultures (broadly defined here as situations in which more than 50 percent of farming income originated from a single crop, see Table 4) is far more complicated, as attested by the conflicting

results obtained for the eight sampled communities in the province of Arkadiá. The same can be argued about the effects of the integration of the village economy into the market; what can be said, though, is that where production for the market was supplementary (as with onions and figs in Platanos), it probably contributed to the easing of wealth and income differences.

To be sure, it would be unrealistic to expect that the use of descriptive statistics alone would suffice to identify the causes of rural inequality; to this end, additional and larger samples should be used, with a view to testing correlations between multiple variables. For instance, someone might enquire about the exact impact of geography (including elevation, soil quality and access to water), land use, acreage yields, crop distribution and cultivation systems applied, as well as population size and density on inequality. Conclusions from a recent study, which has highlighted the importance of space, geography and environment in relation to forms of rural social organisation, are highly relevant in this regard. Further analysis of samples from the 1830 property rolls will shed more light on how patterns of land ownership and household income vary across communities with distinct characteristics. One would also hope that more quantitative sources from subsequent periods will be unearthed, with a view to examining the long-term evolution of social inequality in specific regions and how it was affected by agricultural change and post-1830 government policies.

What is mostly needed at this stage, though, is to widen the research agenda to incorporate the question of measuring inequality in Greece, especially as the supposedly insurmountable obstacle of the lack of quantitative data on agricultural wealth and income seems to have been somewhat mitigated. This article, which seeks to establish the topic as a subject that merits far more attention on the part of rural historians studying nineteenth-century Greece, is only a first step in this direction. Based on thus far unexploited data on the distribution of landed property from the 1830 land survey to measure wealth and income inequality in a sample consisting of a number of rural communities in the southern Peloponnese, my findings, when compared to other contemporary rural societies, do not support the prevailing view of rural Greece as a particularly egalitarian society with little discernible social differences. Although this conclusion needs to be corroborated by further research, our understanding of rural Greece as a homogeneous society of smallholder farmers seems increasingly outdated.

Institute for Mediterranean Studies, Foundation for Research and Technology Hellas (IMS-FORTH)

<sup>48</sup> Işıl, "Çiftliks."