Jane Whittle and Hilde Sandvik

Introduction

Agriculture dominated the economy of early modern Europe. Yet the contribution of women to the agricultural workforce in this period is often ignored and over-simplified. To take one example recently published in a top economics journal: Harvard and UCLA economists Alesina, Guiliano and Nunn argue that in societies 'that traditionally practiced plough agriculture ... men tended to work outside the home in the fields, while women specialized in activities within the home' and attempt to show that the historical practice of plough agriculture correlates with modern cultural assumptions of the woman's place being in the home.¹ Their article classifies the whole of Europe as an area of plough agriculture and argues that use of the plough was associated with an increased male dominance of the tasks of 'land clearance, soil preparation, crop tending and harvesting', but had little impact on women's involvement in tasks such as 'caring for small animals, caring for large animals, milking, cooking, fuel gathering, water fetching', as well as 'handicraft production and trading'. These findings, they say, 'are consistent with women working less in societies that traditionally used the plough'.² To support these sweeping statements, Alesina et al. refer to no historical studies at all, but instead draw data from compilations of ethnographic studies by Murdock and White, which itself codifies ethnographic research undertaken in the 1960s and earlier.³ As such, the article illustrates a series of common problems in academic approaches to women's work in agriculture. These include failing to use the available evidence; mistaking ideological statements and generalizations about gendered work patterns for descriptions of actual work patterns; overgeneralization about work patterns; equating lesser involvement in arable agriculture with working 'within the home'; assuming that if women did not

¹ Alberto Alesina, Paola Guiliano and Nathan Nunn, 'On the origins of gender roles: Women and the plough', *Quarterly Journal of Economics* 128 (2013), 469–530, 470–71. ² Alesina, Guiliano and Nunn, 'Origins of gender roles', 482, 487.

³ Alesina, Guiliano and Nunn, 'Origins of gender roles', 478–82.

work in the same way as men then they worked less; and oversimplifying the causes of gendered work patterns.

Historical studies of early modern Europe do not question women's involvement in agriculture but, relative to the number of women involved, this form of work draws remarkably little attention and tends to be presented as a static form of traditional work. There is no comparative study of women's work in early modern European agriculture. The topic occupies only a few pages in survey histories of women's lives and work such as Merry Wiesner-Hanks' Women and Gender in Early Modern Europe and Deborah Simonton's A History of European Women's Work: 1700 to the Present.⁴ A recent survey of rural economy and society in north-western Europe does address the gender division of labour, but only with a paragraph or so for each region.⁵ This leads to more generalizations. Thus, for Scandinavia it is stated that men 'were in general associated with outdoor labour in the fields', while 'female work included indoor duties but also the tending of cattle, sheep and poultry, milking and work connected with various products such as brewing, slaughtering, salting, smoking meat and the production of textiles from wool and linen'.⁶ Yet, as is discussed in the 'Two Case Studies' section, women dominated coastal Norway's agricultural workforce, including much of arable agriculture, while for Sweden Maria Ågren and collaborators have demonstrated that women were involved in grain cultivation and forestry.⁷

Women's greater involvement in livestock farming in comparison to arable farming is a persistent theme, but one that is based on little detailed analysis. This argument was recently taken up by Voigtländer and Voth.⁸ The authors argue that the switch from arable to pastoral agriculture after the Black Death led to a concomitant increased demand for women's labour, kick-starting the low-pressure demographic regime of late marriage known as the European Marriage System, which in turn explained the rising economic dominance of north-west Europe. Voigtlander and Voth argue that 'because plow agriculture

⁴ Merry E. Wiesner-Hanks, *Women and Gender in Early Modern Europe* (Cambridge: Cambridge University Press, 2008), 105–10; Deborah Simonton, *A History of European Women's Work:* 1700 to the Present (London: Routledge, 1998), 27–36. Simonton discusses farm work after 1800 in other sections.

⁵ Eric Vanhaute, Isabelle Devos and Thijs Lambrecht (eds.), *Rural Economy and Society in North-Western Europe: Making a Living: Family, Income and Labour, 500–2000* (Turnhout: Brepols, 2011), 53–54, 109–10, 167–68, 275.

⁶ Vanhaute, Devos and Lambrecht (eds.), *Rural Economy and Society*, 275.

⁷ Jonas Lindström, Rosemarie Fiebranz and Göran Rydén, 'The diversity of work', in Maria Ågren (ed.), Making a Living, Making a Difference: Gender and Work in Early Modern European Society (Oxford: Oxford University Press, 2017), 24–56, 30–33.

⁸ Nico Voigtländer and Hans-Joachim Voth, 'How the West "invented" fertility restriction', *American Economic Review* 103 (2013), 2227–64.

requires physical strength, women have a comparative advantage in livestock farming' and thus 'female employment opportunities improved' after the Black Death.⁹ They conclude 'female labour is better suited to shepherding and milking than to ploughing and threshing', citing the article just discussed by Alesina et al., and 'the sexual division of labor in isolated tribes studied by anthropologists'.¹⁰ They also assume women's farm work 'mainly took the form of farm service'; and as farm service was undertaken by young unmarried women, rising work opportunities led to increased age at marriage.¹¹ There is little historical evidence to support this argument. Ogilvie has shown that, in south-west Germany there was little difference between men's and women's contribution to pastoral or arable agriculture, women's contributions to both types of farming were considerable and made by women at all stages of the life-cycle.¹² The case study of south-west England presented in the 'Two Case Studies' section draws similar conclusions for that region.¹³

Within English agrarian history, the idea that women found more employment in pastoral economies can be traced back to Snell. In Annals of the Labouring Poor, discussing contrasts between English regions in the eighteenth century, he notes that 'that female specialisation in livestock, dairying and haymaking, while adversely affecting women in the east, may have been more favourable for them in the west' and 'as the eighteenth century progressed, the simple formula - of female involvement in pastoral activities and of men in the harvest – became more applicable'.¹⁴ This idea was taken up by Goldberg in his examination of women's work in the late fourteenth and fifteenth centuries. Goldberg argued that 'pastoral agriculture with its dairy component and opportunity for by-employments, appears to have offered more scope for the employment of women (and servants) than was true of arable husbandry with its more seasonal labour requirements'.¹⁵ It should be stressed, however, that both Snell and Goldberg were quite tentative in these assertions, as neither had direct evidence of women's employment in agriculture. Snell's conclusions were based on changes in late eighteenth-century agricultural

⁹ Voigtländer and Voth, 'How the West', 2228.

¹⁰ Voigtländer and Voth, 'How the West', 2259-60.

¹¹ Voigtländer and Voth, 'How the West', 2228–29.

¹² Sheilagh Ogilvie, A Bitter Living: Women, Markets, and Social Capital in Early Modern Germany (Oxford: Oxford University Press, 2003), 124, 143.

¹³ See also Jeremy Edwards and Sheilagh Ogilvie, 'Did the Black Death cause economic development by "inventing" fertility restriction?', CESifo Working Papers 7016 (2018), available at: https://www.ssrn.com/index.cfm/en/ (last accessed 27 November 2019), especially 15–21.

¹⁴ K. D. M. Snell, *Annals of the Labouring Poor* (Cambridge: Cambridge University Press, 1984), 45, 49.

¹⁵ P. J. P. Goldberg, *Women, Work, and Life Cycle in a Medieval Economy* (Oxford: Oxford University Press, 1992), 355.

methods and his impressions about regional differences in women's agricultural wages; Goldberg was seeking to explain differences between regions in the sex ratios recorded in the late fourteenth century English Poll Tax and was discussing work opportunities more generally (including cloth production) rather than just agriculture.

Detailed studies of a range of European regions show that almost all these assumptions are unfounded. Women did sometimes plough and thresh, but more significantly found plentiful employment in other aspects of arable farming such as sowing, weeding and harvesting. Women monopolized milking in most early modern European societies, but their involvement in herding beef cattle or sheep varied by region. Studies of the work women actually did in the agricultural economy, including those presented in this chapter, demonstrate that there was a great deal of variation between countries, regions and even farms, which in turn reveals the flexibility of both agricultural systems and the gender division of labour.¹⁶ What Alesina et al. and Voigtlander and Voth do demonstrate is that having an adequate knowledge of women's agricultural work in historic societies matters. It contributes to the understanding of demographic change, of labour productivity and estimates of GDP. Of course, most of all, it matters because how we understand women's lives and value women's contribution to past societies and economies matters and influences modern attitudes to women's place in economy and society.

The following two sections provide an overview of the latest research on women's work in agriculture. They review a range of factors affecting the gender division of labour in agriculture before examining the variety of gendered agricultural systems found in early modern Europe. The final part of the chapter offers two detailed case studies from regions with contrasting patterns of gendered work. In coastal Norway women dominated agricultural work while men followed other occupations; in south-west England women contributed around a third of agricultural work, but nonetheless undertook a wide range of tasks in both arable and pastoral agriculture. The case studies also introduce the range of sources and research methods than can be used to investigate women's agricultural work. The aim of the chapter is to demonstrate that many generalizations about women's work in agriculture are based on the false assumption not only that the types of work women did, but the reasons why they did that work, were static and universal. To understand the influence of women's work on economic change it is necessary to acknowledge the many differences that existed, across time and geography, in the gender division of labour.

¹⁶ Ogilvie, *Bitter Living*, 119.

Explaining the Gender Division of Labour

In her survey of women and gender in early modern Europe, Wiesner-Hanks summarizes the causes of men's and women's different work patterns in the countryside:

These gender divisions were partly the result of physical difference, with men generally doing tasks that required a great deal of upper-body strength, such as cutting grain with a scythe. They were partly the result of women's greater responsibility for child-care, so that women carried out tasks closer to the house ... They were partly the result of cultural beliefs, so that women in parts of Norway, for example, sowed all grain because people felt this would ensure a bigger harvest.¹⁷

In this section we argue that these commonly recited explanations are oversimplified and even, in some cases, inaccurate. A more sophisticated discussion of the causes behind the gender division of labour in rural societies is provided by Ogilvie.¹⁸ She groups existing explanations under three headings: technological, cultural and institutional. Technological explanations concentrate on women's physical capability and how this interacts with different forms of work equipment such as ploughs and scythes. Cultural explanations cite patriarchy or custom as the underlying reason - which are seen as giving rise to 'norms governing marriage, household structure, sexuality ... education' and so on. Institutional approaches examine the structures that organize society: particularly rules laid down as laws or regulations. Ogilvie's framework is useful for thinking about explanations of gender differences in work patterns; however, as is demonstrated by the following discussion, in many cases it is necessary to explore a combination of these explanations, or to cite factors which do not sit easily in any of them, rather than choosing one or another. The rest of this section looks in turn at technology and physical strength, farm size and agricultural specialization, and alternative employments to agriculture as explanations of particular regional patterns of gender divisions in rural labour. It then considers different forms of employment and life-stages and finally the debate over the gender pay gap.

Early modern agriculture was physically demanding. Many forms of work required strength and stamina. Joyce Burnette uses twentieth-century data from the US Army to show that, while men and women have similar capabilities in terms of activities such as running two miles and doing sit-ups, men are much better at lifting heavy weights due to their superior upper body

¹⁷ Wiesner-Hanks, Women and Gender, 105–6. Wiesner-Hanks offers a more detailed and nuanced discussion in the fourth edition of her book: Women and Gender in Early Modern Europe (Cambridge: Cambridge University Press, 2019), 119.

¹⁸ Ogilvie, *Bitter Living*, 7–15.

strength.¹⁹ Against this argument, however, there are two provisos. One is that averages do not indicate the capabilities of particular individuals and there is a great deal of overlap between the genders, so some women are stronger than some men. The other is that strength is not only a matter of innate ability but is also conditioned or developed by normal forms of work - so women who are expected to do strenuous forms of work from a young age will be stronger than those who are not.²⁰ Physical strength interacted with technology in many forms of agricultural work in early modern Europe. Both women and men harvested grain with sickles, but only men are recorded using the scythe.²¹ The scythe was a quicker means of harvesting grain crops and required greater physical strength.²² While there is no physical barrier to women using a scythe,²³ it is apparent that women were not taught this skill, thus strong women had no opportunity to earn the high wages paid for this activity. Other activities such as driving ploughs and carts and threshing grain were normally done by men, but sometimes by women on smaller farms or at times of particular need.²⁴ This demonstrates that women were not incapable of doing these things. Women with physical strength were prized by employers as maid servants.²⁵ Careful consideration suggests that physical strength may be an element in some differences between men's and women's work, but not all the difference, as the cultural assumptions of parents and employers barred women from becoming skilled in some activities, whether or not they had the physical ability to do them.

The gender division of labour in agriculture was not fixed but varied between regions and changed over time as new activities and ways of organizing work were adopted. For instance, a higher proportion of agricultural work was done by women on smaller farms than on large farms. This can be demonstrated by the fact smaller farms employed a higher proportion of female servants compared to male servants than larger farms; as was the case in both

²⁴ See section on south-west England.

 ¹⁹ Joyce Burnette, 'An investigation of the female-male wage gap during the industrial revolution in Britain', *Economic History Review* 50 (1997), 257–81, especially 275.
²⁰ Area Funct Statise, Markey & Conden Biological Theories and Marc New York.

²⁰ Anne Fausto-Sterling, *Myths of Gender: Biological Theories about Women and Men* (New York: Basic Books, 1992), 214–20.

²¹ Michael Roberts, 'Sickles and scythes: Women's work and men's work at harvest time', *History Workshop* 7 (1979), 3–28.

²² Mark Overton, Agricultural Revolution in England: The Transformation of the Agrarian Economy 1500–1850 (Cambridge: Cambridge University Press, 1996), 12, 122–24.

²³ A female farmer in Cornwall reported using a scythe regularly to cut hay in the late twentieth century – personal communication.

²⁵ Ogilvie, Bitter Living, 126; Donald Woodward (ed.), The Farming and Memorandum Books of Henry Best of Elmswell 1642 (Oxford: Oxford University Press for the British Academy, 1984), 138.

early modern Flanders and England.²⁶ It is also indicated by the fact that women provided around 20 per cent of days worked by wage labourers on large farms in south-west England in 1650–1870,²⁷ but performed around 37 per cent of total agricultural work tasks on all farms (including smaller farms) in the same region in 1550–1700.²⁸ Christopher Pihl found a similar pattern on Swedish royal demesnes in 1539-1610: a higher proportion of women were employed on smaller demesnes.²⁹ This demonstrates that women were useful and skilled agricultural workers, most commonly employed when a wide variety of different tasks needed to be performed. Robert Allen found that, on English farms in 1770, 'employment per acre declined with size [of farms] for all categories of workers and especially for women and children'. However, his analysis of data collected by Arthur Young did not include female day labourers.³⁰ Verdon's more detailed examination of the employment of female day labourers employed on larger farms in the late eighteenth and first half of the nineteenth century using farm accounts shows female day labourers provided between 6 and 42 per cent of days worked by labourers, varying over time and by region.³¹

Another important influence on gendered work in agriculture was the availability of non-agricultural work. For instance, the high demand for female hand-spinners in eighteenth-century England may have caused some women to withdraw from agricultural work.³² Thus it is possible that, rather than women

²⁶ Thijs Lambrecht, 'The institution of service in rural Flanders in the sixteenth century: A regional perspective', and Jane Whittle, 'A different pattern of employment: Servants in rural England c.1500–1660', in Jane Whittle (ed.), *Servants in Rural Europe 1400–1900* (Woodbridge: Boydell Press, 2017), 37–55, 57–76, especially 43, 60–62.

 ²⁷ Helen V. Speechley, 'Female and child agricultural day labourers in Somerset, c.1685–1870', unpublished PhD thesis, University of Exeter (1999), 57.

²⁸ Discussed in the section on south-west England; see also Jane Whittle and Mark Hailwood, 'The gender division of labour in early modern England', *Economic History Review* 73 (2020), 3–32, 12.

²⁹ Smaller demesnes employed 27–47 annual workers, of whom 34–49 per cent were female; on the largest estate, 258 workers were employed and only 10 per cent were female: Christopher Pihl, 'Gender, labour and state formation in sixteenth-century Sweden', *Historical Journal* 58 (2015), 685–710, 703.

³⁰ Robert Allen, *Enclosure and the Yeoman: The Agricultural Development of the South Midlands* 1450–1850 (Oxford: Oxford University Press, 1992), 215. Arthur Young tabulated workers as servants, maids, boys and labourers. It was assumed by Young and Allen that servants and labourers were all male: Arthur Young, A Six Month Tour through the North of England, vol. 4 (London: W. Strahan, 1770), 385–95.

³¹ Nicola Verdon, Rural Women Workers in 19th-Century England: Gender, Work and Wages (Woodbridge: Boydell Press, 2002), 99–105. This labour was primarily engaged in hoeing, weeding, hay-making and some harvest work.

³² Between 1590 and 1760, demand for spinners in England grew 700 per cent, while population increased by 64 per cent: Craig Muldrew, "Th'ancient distaff and whirling spindle": Measuring the contribution of spinning to household earnings and the national economy of England, 1550–1770', *Economic History Review* 65 (2012), 498–526, 510, 519–21.

being excluded from harvest work by the increased use of the scythe, as argued by Snell, women who made good earnings from spinning were less willing to do harvest work, and thus farmers had to find a way of harvesting with a smaller workforce – by using the scythe more often.³³ Domestic service in towns also provided an alternative employment for women in many parts of Europe and attracted growing numbers of women as the size of urban populations increased.³⁴ Conversely, elsewhere the availability of alternative employment for men led to women doing a higher share of agricultural work, as is discussed in the next two sections.

Work not only varied by gender, but also by age and according to employment relations. Thus, over a lifetime, a woman might work as a child on her parents' farm; as a servant on an employer's farm; as a wife and widow on her own farm; and as a wage labourer on various neighbouring farms. Each of these stages and forms of employment was likely to involve somewhat different work repertoires. Ågren found that, in early modern Sweden, marital status and household position 'were much more important in structuring work patterns and determining access to income than was gender'.³⁵ Similarly, Whittle and Hailwood found that, in rural England, female servants did more agricultural work tasks than wives or widows, while wives did more commercial work tasks and widows more tasks involving care-work.³⁶ In England the work of female servants differed substantially from that of female day labourers: servants were more likely to do dairying, food processing and marketing, while female day labourers were most likely to work in arable agriculture.

The debate over the causes of the gender pay gap distils many of the issues discussed here. In an influential and carefully evidenced article, Burnette found that, in England during the period of the Industrial Revolution, differences in agricultural wages between men and women were primarily the consequence of differences in productivity rather than custom. Men had a higher productivity (per day worked) because of their greater physical strength and because they worked longer hours than women.³⁷ These findings were applied to medieval England by Hatcher, who suggested female labourers were paid less in the late fourteenth century because they worked 'fewer hours in the fields each day' than men.³⁸ Early nineteenth-century evidence does show that

³³ Snell, Annals of the Labouring Poor, 50.

³⁴ For France, see Jeremy Hayhoe, 'Rural servants in eastern France 1700–1872: Change and continuity over two centuries', in Jane Whittle (ed.), *Servants in Rural Europe 1400–1900* (Woodbridge: Boydell Press, 2017), 149–54. See also Chapter 6.

³⁵ Maria Ågren, 'Conclusion', in Maria Ågren (ed.), Making a Living, Making a Difference: Gender and Work in Early Modern European Society (Oxford: Oxford University Press, 2017), 204–20, 211.

³⁶ Whittle and Hailwood, 'Gender division of labour', 22. ³⁷ Burnette, 'Investigation'.

³⁸ John Hatcher, 'Debate: women's work reconsidered: Gender and wage differentiation in late medieval England', *Past & Present* 173 (2001), 191–99, 194.

female agricultural labourers often worked shorter days than men, arriving at 8 am and working for 10 hours, while men arrived at 6 am and worked 12 hours a day.³⁹ However, there is no evidence of this pattern of work in earlier periods.⁴⁰ It seems likely that the long hours worked by men in the early nineteenth century were a symptom of the harsh working conditions and low pay experienced by English agricultural workers at that time. Working these hours six days a week would not have been compatible with caring for one's own land or livestock, as was often the case for labouring families in the earlier period.⁴¹

The legal maximum wage rates which were set in England annually for each county from 1563 onwards gave different wages for men and women, demonstrating a legal expectation that women would be paid less than men for doing the same tasks. For instance, women's daily wages were 71 per cent of men's for harvesting corn with a sickle and 64 per cent of men's for haymaking.⁴² Humphries and Weisdorf demonstrate that the actual gap between male and female labourers' wages was even greater, with men's wages two or three times higher than women's on average in England between 1550 and 1660.43 Despite equal wage legislation and equal access to education, the gender pay gap still exists in the present day. For hourly pay it stood at 18.4 per cent in the United Kingdom in 2017.⁴⁴ Analysis demonstrates that 36 per cent of this gap can be explained: the most important factor is men and women working in different types of occupations (accounting for 23 per cent of the difference); and the fact women are more likely to work part-time than men was also important (accounting for 9 per cent of the difference).⁴⁵ But most of the gap cannot be easily explained. If that is the case now, it seems highly unlikely that the pay gap in early modern agriculture - in a period when governments

³⁹ Burnette, 'Investigation', 268.

⁴⁰ The earliest evidence is from the 1790s. On the earlier period, see Mark Hailwood, 'Time and work in rural England 1500–1700', *Past & Present* 248 (2020), 87–121.

⁴¹ Jane Whittle, 'Land and people', in Keith Wrightson (ed.), A Social History of England, c.1500-c.1750 (Cambridge: Cambridge University Press, 2017), 152–73.

⁴² From 21 wage assessments for reaping and 12 wage assessments for haymaking, dating from 1563 to 1595.

⁴³ Jane Humphries and Jacob Weisdorf, 'The wages of women in England, 1260–1850', *Journal of Economic History* 75 (2015), 405–47, 428. In 1500–50 and c.1660–1750 men's wages were around 1.5 the size of women's wages, and in 1550–c.1660 they were 2- or 3-times women's wages. The wage assessments show men's wages for reaping were 1.4 times larger than women's, while for haymaking they were 1.5 times larger.

⁴⁴ The figure is 9.1 per cent for full-time workers. Office for National Statistics (ONS), 'Gender pay gap in the UK, 2021' (2021), figure 1, available at: www.ons.gov.uk/employmentandla bourmarket/peopleinwork/earningsandworkinghours/bulletins/genderpaygapintheuk/2021 (last accessed 18 January 2022).

⁴⁵ ONS, 'Understanding the gender pay gap' (2018), section 6, 24–26, available at: www.ons.gov .uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/articles/understan dingthegenderpaygapintheuk/2018-01-17 (last accessed 3 December 2019).

legislated to create unequal wages – can be explained only by average differences in physical strength.

There are rarely simple explanations for particular divisions of labour between men and women in the rural economy. Rather than starting with assumptions that women were excluded from certain activities due to lack of upper body strength or childcare responsibilities we should start with the assumption that women could do almost anything and then examine what they did in particular regions and the range of influences that were at play. Adequate explanations can rarely be found by looking only at the labour market, at physical ability or at legal regulation or custom but instead these influences and others interacted, leading to particular outcomes in different times and places.

Regional Economies and Gendered Work in Agriculture

Sheep farming in Shetland and Iceland, grapes and olives in the Mediterranean, grain for export produced by serfs on Polish manors, wheat, peas and clover on enclosed, well manured fields in southern England: these illustrate some of the many forms for agricultural systems that existed in early modern Europe from north to south, and east to west. Europe's geographical reach from 36 to 72 degrees north, with mountains, plains, valleys and coasts, speaks against any easy generalization about production in the early modern countryside and especially the gender division of labour. About 80 per cent of Europe's population, which grew from perhaps 80 million in 1500 to 190 million in 1800, lived in the countryside. Here we highlight a selection of regions to underline the diversity of Europe's farming practices and the gendered work arrangements that supported them.

Southern Europe

In the Mediterranean region, the cultivation of grain was combined with olives, viticulture and sheep farming. Emigh used the *Catasto* of 1427 to illuminate the gender division of labour in fifteenth-century Tuscany. She compared the work activities declared by men and women in single person households and found that, while both men and women produced wine and olives for the market, men were more likely to be involved in grain production than women. As grain was more often grown for subsistence, this meant that women were more engaged in agricultural production for the market, specializing in producing wine and olives on their smallholdings.⁴⁶ In the area around Seville in

⁴⁶ Rebecca Jane Emigh, 'The gender division of labour: The case of Tuscan smallholders', *Continuity and Change* 15 (2000), 117–37, 124–27. southern Spain in the early sixteenth century, agricultural labour by women and men alternated between work on their own small farms cultivating vines and waged work on large estates that grew wheat and olives. In winter and early spring, men worked for wages on the large estates, ploughing to prepare for cereal crops and tending olive groves. Meanwhile, on the smallholdings, women dug and hoed around the vines to allow them to absorb moisture from winter rain. Men then worked harvesting grain on the large estates in July and August, before returning to work on their own land, harvesting grapes in September. The olive harvest, in November to January, however, was largely the work of women, who left their smallholdings to work for wages in large groups on the estates, while men remained at home pruning the vines.⁴⁷ Women's paid labour in agriculture is evident elsewhere in Spain and Italy: on the island of Mallorca an agricultural workforce of male slaves was replaced on large estates in the fifteenth and sixteenth century with labourers paid low wages, around 50 per cent of whom were women.⁴⁸ In the same period in the region of Arezzo in Italy women migrated from poorer areas to work as seasonal reapers in the grain harvest and women also laboured in the cultivation of woad.49

In inland Spain on the plains of *la Mancha* in the mid-eighteenth century, Sarasúa's analysis of the Cadaster of Ensenada (1750-55) shows that rural women were typically employed in textile production. Men worked as agricultural labourers harvesting grain, grapes and olives, and were employed as shepherds caring for large transhumant sheep flocks.⁵⁰ In contrast 'women and girls worked in the fields in a limited number of situations': they raised flax and laboured in family orchards, they made cheese and as widows might run farms but they were rarely employed as agricultural labourers. As a consequence, the primary sector (predominantly agriculture) was the main occupation of 60 per cent of men but only 3 per cent of women. In contrast, the secondary sector (largely textile production) occupied 24 per cent of men and 63 per cent of women.⁵¹ All these examples demonstrate flexible divisions of labour combining different elements of the economy.

Mercedes Borrero Fernández, 'Peasant and aristocratic women: Their role in the rural economy of Seville at the end of the Middle Ages', in Marilyn Stone and Carmen Benito-Vessels (eds.), Women at Work in Spain: From the Middle Ages to Early Modern Times (New York: Peter Lang, 1998), 11-31, 14-15.

⁴⁸ Gabriel Jover-Avella, Antoni Mas-Forners, Ricard Soto-Company and Enrique Tello, 'Socioecological transition in land and labour exploitation in Mallorca: From slavery to a low-wage workforce, 1229-1576', Sustainability 11 (2019), 1-26, 19-20.

⁴⁹ Gabriella Piccinni, 'Le donne nella mezzadria toscana delle origini', in A. Cortonesi and G. Piccinni (eds.) Medioevo delle campagne. Rapporti di lavoro, politica agraria, forme della *protesta* (Rome: Viella, 2006), 153–203, 155. ⁵⁰ Carmen Sarasúa, 'Women's work and structural change: Occupational structure in eighteenth-

century Spain', Economic History Review 72 (2018), 481-509, 491-92.

⁵¹ Sarasúa, 'Women's work', 494–95.

Mountainous Regions

Mitterauer contrasts the division of labour found in alpine farms in the Tyrol, with wine-producing smallholdings in lowland Austria. He notes that nearly all the work of viticulture could be done just as easily by women as by men, thus work was shared between the genders and widows often ran such farms without remarrying. In contrast, he argues, a 'strict separation of work roles can be found among the mountain peasantry' of the Austrian Alps, and 'bringing in mountain hay, for example, is men's work'.⁵² Yet he also notes the prevalence of seasonal out-migration from mountain communities, with adult men and young people of both genders migrating to work elsewhere during the summer, leaving married women to combine managing the farm and caring for young children. Viazzo finds a similar pattern in the Italian Alps in the mid-nineteenth century. He writes, 'agriculture was the realm of women. Men's realm was emigration - a seasonal emigration which took place in the summer and was therefore incompatible with the requirements of agricultural work'.⁵³ In contrast to Mitterauer, Viazzo argues that 'pastoral activities are less labour-intensive, and more suitable to women and children', and the high Alps were dominated by pastoral agriculture. Young women took cows up to alpine pastures, while married and older women cultivated the fields near the village. Women managed the hay harvest by hiring boys or itinerant male labourers to mow the hay and by sending some of their cattle to winter in the lowlands, reducing the need for fodder.⁵⁴ Similar accounts of women dominating agriculture due to seasonal male out-migration are found from other upland regions such as the Auvergne in central France. When Arthur Young visited this region in the 1780s, he reported that only women did farm work.⁵⁵ These examples show not only women's capability of managing agriculture largely without male labour but also the adaptability of gender roles and farming systems.

Northern Europe

Rural households in northern Europe struggled to make a living in a region where only 3-5 per cent of the land was arable. Between 58- and 71-degrees north population density was low, with about 4 inhabitants per square kilometre compared to 40 in France in the eighteenth century. Households made their living by combining agriculture with trades for export, such as fishing,

⁵² Michael Mitterauer, 'Peasant and non-peasant family forms in relation to the physical environment and the local economy', Journal of Family History 17 (1992), 139-59, 155.

⁵³ Pier Paolo Viazzo, Upland Communities: Environment, Population and Social Structure in the Alps since the Sixteenth Century (Cambridge: Cambridge University Press, 1989), 103–4. ⁵⁴ Viazzo, Upland Communities, 110–16.

⁵⁵ Olwen Hufton, The Prospect before Her: A History of Women in Western Europe, vol. 1, 1500-1800 (London: Harper Collins, 1995), 160-62.

forestry, mining and tar- and charcoal-burning. Grain imports increased during the early modern period. Norway had imported grain since the Middle Ages and Sweden imported grain from the mid-seventeenth century onwards.⁵⁶ The smallholders in this region relied on a mixture of arable and livestock with by-employment to pay for imported grain. A typical farm had between two and seven hectares of arable land for crops. Two oxen and four cows, sheep, goats and pigs were normal on southern Swedish farms.

On the small farms in northern Scandinavia the light North Sea plough or *ard* was drawn by a single horse, as also happened in Scotland.⁵⁷ When men were away, at sea or at war, women in Norway and Sweden ploughed.⁵⁸ For those without draught animals, the cultivation of small farms with stony fields all over Scandinavia was done by spade.⁵⁹ Inventories with spades for all household members and travel reports from western Norway indicate that all households' able members, both men and women, took part in digging the fields. Transhumance to summer farms in the mountains was women's work both in Norway and Sweden.⁶⁰ On the summer farms women produced cheese and butter, often enough to pay both taxes and land rents. Milking was in general women's work. The cows only gave milk during summer and were 'dry' during long winters in the byre due to the lack of fodder. Goats also gave milk and were the only affordable milking animal for many poor households. Women and children worked herding animals as the men were needed elsewhere.⁶¹

Slash and burn was the agricultural technique in eastern Finland. Rye was sown in the warm soil fertilized by ashes from old pine trees. This special rye could give enormous yields, 1:100 in the second year. After three years the plots were left as pasture for livestock and a new place was made ready to burn. Extended families did the heavy work together and rotated their field plots in the woodland, making new plots into arable fields and later pastures. In west Finland it was women's work to plough the heavy soil with oxen.⁶² This work pattern was a consequence of households adapting to Swedish warfare in the seventeenth century, which conscripted Finnish boys and men. Men were

⁵⁶ Janken Myrdal, 'Farming and feudalism 1000–1700', in Janken Myrdal and Mats Morell (eds.), *Agrarian History of Sweden* (Lund: Nordic Academic Press, 2011), 72–117.

⁵⁷ Myrdal, 'Farming and feudalism', 83.

⁵⁸ Janken Myrdal, Det svenska jordbrukets historia (Stockholm: Natur och Kultur/ LTs Förlag, 1999), 230, 309–17.

⁵⁹ Brynjulv Gjerdåker, Kontinuitet og modernitet 1814–1920, Norges landbrukshistorie Band. III (Oslo: Det Norske Samlaget, 2002), 30; Myrdal, 'Farming and feudalism', 84–85; Fartein Valen-Senstad, Norske landbruksredskaper 1800–1850-årene (Lillehammer: De Sandvigske samlingers skrifter IV, 1964), 28–38.

⁶⁰ Myrdal, 'Farming and feudalism', 106. ⁶¹ Myrdal, 'Farming and feudalism', 87.

⁶² Ulla-Brit Lithell, Kvinnoarbete och barntillsyn i 1700- og 1800-talets Österbotten (Uppsala: Studia Historica, 1988), 156.

sent to the war on the continent and about 30 per cent of Swedish and Finnish men died as a consequence.⁶³ Tar was produced from pine roots; tar production was a male occupation and it was men's work to transport the tar in bushels on riverboats south to the market towns by the Baltic Sea. Men made tar to raise money to hire a replacement so as to be excused from military service, and in the more peaceful eighteenth century, tar production continued to secure extra income for farming households. Later this was replaced by male migration to the cities for work, resulting over time in an agrarian regime dominated by female labour.

Eastern Europe under Serfdom

Across eastern and east-central Europe serfdom dominated economic relationships in the countryside from at least the late-sixteenth century to the lateeighteenth century. From eastern Germany to Russia, and from Bohemia to Lithuania, villagers were subject to a 'second serfdom' which demanded high payments from peasants and smallholders to manorial landlords in labour, cash and kind. In Poland, grain was produced for export. Men and women in serf households were obliged to work three, four or even more days per week for the manor. Bogucka concludes that 'the common serf's harsh fate contributed to the blurring of gender differences'.⁶⁴ Men and women worked the fields and harvested; on their own holdings they normally had some livestock and a garden and women could produce yarn, butter, cheese, poultry and eggs for sale at weekly markets in the closest town. As a consequence, the little cash of the peasant household relied heavily on women's market-oriented production.⁶⁵ A similar situation was found in Lithuania. As serfs, men, women and children had to work four or five days a week, normally from Monday to Friday, for the manor. Unfree women who lived close to the manor wove, spun and tended the livestock for the lords.⁶⁶ In Silesia cottage tenants were required to provide the daily labour of 'two persons, namely both man and wife, or, instead of the latter, a capable maid, in all kinds of manor work, whatever it might be'. At harvest time they had to provide a third

⁶³ Jan Lindegren, Utskrivning och utsugning: produktion och reproduktion i Bygdeå 1620–1640 [Conscription and exploitation: Production and reproduction in the parish of Bygdeå 1620–1640] (Uppsala: Studia Historica, 1980), 117.

⁶⁴ Maria Bogucka, Women in Early Modern Polish Society, against the European Background (London: Routledge, 2016), 39.

⁶⁵ Bogucka, Women, 38.

⁶⁶ Neringa Dambrauskaitė, 'Noblemen's familia: The life of unfree people on manors in the sixteenth century and the first half of the seventeenth century', in Richard Butterwick and Wioletta Pawlikowska (eds.), Social and Cultural Relations in the Grand Duchy of Lithuania: Microhistories (London: Routledge, 2019), 120–31, 125.

labourer. Wives were allowed two weeks off after giving birth or six weeks at harvest time.⁶⁷

For Russia, Glickman notes 'women's participation in heavy field-work and ... the interchangeability of men's and women's field-work' in the nineteenth century. An 11-year old girl from Moscow province who was asked about her work activities in 1880 listed spinning linen, knitting socks for sale, caring for livestock, cleaning the house, caring for younger children, threshing grain and binding sheaves.⁶⁸ Late nineteenth-century photographs show girls threshing grain and women ploughing. Although from a later period they attest to heavy agricultural work being commonly undertaken by women.⁶⁹ Hoch's study of Petrovskoe in Tambov province notes that teams of husband and wife worked the fields, to fulfil the lord's farming operations during the short Russian summer, which required harvesting and ploughing at the same time. Women harvested rye, winter wheat and oats with sickles, while men harvested other spring cereals with scythes. While women collected the grain and transported it off the field to the threshing floor, men started to plough and sow next year's rye crop. To maximize the output of the estate, the manor and the bailiff encouraged early marriage, and new working teams were formed by couples who married at the age of 18 or 19.⁷⁰

Accounts of women's work from this part of Europe not only contradict the assumption that women were incapable of heavy field work, they also demonstrate starkly how women's contribution to the agricultural workforce failed to correlate with status or power within households or village society. Ogilvie demonstrates very low proportions of women heading households under the regime of serfdom in Bohemia between 1591 and 1722. This was a consequence of women's lack of power within village society, which allowed male peasants to override women's requests to run their farms without men. Widowed women were forced to remarry quickly or give up their farms, pressured by male relatives and village leaders, backed up by manorial authorities.⁷¹

⁶⁷ Heide Wunder, *He Is the Sun, She Is the Moon: Women in Early Modern Germany* (Cambridge, MA: Harvard University Press, 1998), 65, quoting from a 1790 estate register.

⁶⁸ Rose L. Glickman, 'Women and the peasant commune', in Roger Bartlett (ed.), Land Commune and Peasant Community in Russia: Communal Forms in Imperial and Early Soviet Society (Basingstoke: Macmillan, 1990), 321–38, 321–22.

⁶⁹ Dating from 1898 and 1900: Christine D. Worobec, *Peasant Russia: Family and Community in the Post-Emancipation Period* (Princeton: Princeton University Press, 1991), 118, 178.

⁷⁰ Steven L. Hoch, 'Serfs in Imperial Russia: Demographic Insights', *Journal of Interdisciplinary History* 13 (1982), 221–46, 244–45.

⁷¹ Sheilagh Ogilvie and Jeremy Edwards, 'Women and the "second serfdom": Evidence from early modern Bohemia', *Journal of Economic History* 60:4 (2000), 961–94, especially 979–85.

Western Germany

In parts of Germany not subject to serfdom, the gender division of labour is described in terms similar to northern France and England. Limberger writes that 'generally, the cultivation of the fields was the task of the man, while cooking, gardening, and taking care of the children were the classic task of the woman. Harvesting and haying were rather tasks the family members carried out together'.⁷² Sabean's study of Neckarhausen in south-west Germany also found that, in the eighteenth century, 'women were not involved very substantially in field crop production, they did not have much to say about marketing such crops, and their work routine went by without much comment from men'.⁷³ However, he argues that this changed in the late-eighteenth century, with the introduction of improved grasses (allowing cattle to be stall fed) and of root crops on the arable fields. Women took charge of cutting fodder to feed the cattle, carrying it some distance from fields to farms bundled on their heads. The considerable labour of planting and hoeing root crops was also a female task.⁷⁴

Ogilvie disputes the novelty of these patterns of work in her more thorough examination of work in the nearby communities of Wildberg and Ebhausen from 1646 to 1800.⁷⁵ She found that agriculture made up a significant proportion of women's work and that women participated in all types of agricultural work, with no particular specialization of women in pastoral or arable agriculture.⁷⁶ Women cut grass and carried heavy loads of hay;⁷⁷ they did all types of fieldwork, including occasional ploughing.⁷⁸ Female servants did a higher proportion of agricultural work (40 per cent of their recorded work tasks) than married women (20 per cent of recorded work tasks) but in both cases the contribution was significant.⁷⁹ It is also revealing that never-married and widowed women were able to run farms on their own without male labour.⁸⁰

North Sea Region (the Low Countries, Northern France, England)

In the most urbanized region of northern Europe only 50 per cent of the male labour force worked in agriculture.⁸¹ Agriculture was highly commercialized,

⁷² Michael Limberger, 'North-west Germany, 1000–1750', in Eric Vanhaute, Isabelle Devos and Thijs Lambrecht (eds.), *Rural Economy and Society in North-Western Europe: Making a Living: Family, Income and Labour, 500–2000* (Turnhout: Brepols, 2011), 219.

⁷³ David Warren Sabean, Property, Production, and Family in Neckarhausen, 1700–1870 (Cambridge: Cambridge University Press, 1990), 25.

⁷⁴ Sabean, *Property, Production, and Family*, 148–51. ⁷⁵ Ogilvie, *Bitter Living*, 121, 126.

⁷⁶ Ogilvie, *Bitter Living*, 31, 119–21, 143–45. ⁷⁷ Ogilvie, *Bitter Living*, 147, 294.

⁷⁸ Ogilvie, *Bitter Living*, 119, 200. ⁷⁹ Ogilvie, *Bitter Living*, 123, 141.

⁸⁰ Ogilvie, *Bitter Living*, 249, 287.

⁸¹ Jan de Vries and Ad van der Woude, *The First Modern Economy: Success, Failure and Perseverance of the Dutch Economy, 1500–1800* (Cambridge: Cambridge University Press, 1997), 195; Leigh Shaw-Taylor and E. A. Wrigley, 'Occupational structure and population

with large grain-producing farms in northern France and eastern and midland England, as well as farms producing dairy products, meat, vegetables and industrial crops, particularly in the Low Countries and on the outskirts of cities. Across this region a similar gender division of labour in agriculture is reported. Married women and female servants ran dairies, raised poultry and used gardens to grow vegetables. Female day labourers were employed to weed grain crops in the early summer. Women took part in hay making and the grain harvest: sometimes harvesting with a sickle or binding the cut corn into sheaves.⁸²

The best evidence survives for the late-eighteenth and early-nineteenth centuries. Given that women's participation seems to have declined over time as farm size and commercialization increased, the widespread evidence of women's agricultural work at this late date is important to note. For the Groningen region of the Netherlands during the early-nineteenth century, van Nederveen Meerkerk and Paping found that female agricultural servants were common, with an average of 1.1 farm maids per farm in 1829 (compared to 1.5 male farm hands). Farm accounts reveal large groups of female day labourers employed between April and June to weed crops, and women working in the harvest binding sheaves. On four large farms with accounts dating from 1773 to 1843 women provided between 8 and 34 per cent of days worked by labourers.⁸³ In eighteenth-century Zeeland, large arable farms made use of married women's labour. Labourers' wives provided a seasonal agricultural workforce while the wives of large farmers ran small dairies and tended orchards and vegetable gardens to provide themselves with an independent source of income.⁸⁴

In the Caux region of Normandy in France, arable agriculture was combined with producing cotton and linen cloth. Here women spun yarn all year round for their main income, but also raised vegetables and flax, cared for livestock

change', in Roderick Floud, Jane Humphries and Paul Johnson (eds.), *The Cambridge Economic History of Modern Britain*, vol. 1 *1700–1870* (Cambridge: Cambridge University Press, 2014), 53–88, 59.

⁸² Phillipp Schofield and Jane Whittle, 'Britain: 1000–1750', in Eric Vanhaute, Isabelle Devos and Thijs Lambrecht (eds.), *Rural Economy and Society in North-Western Europe: Making a Living: Family, Income and Labour, 500–2000* (Turnhout: Brepols, 2011), 47–70, 53–54; Gérard Béaur and Laurent Feller, 'Northern France, 1000–1750', in Eric Vanhaute, Isabelle Devos and Thijs Lambrecht (eds.), *Rural Economy and Society in North-Western Europe: Making a Living: Family, Income and Labour, 500–2000* (Turnhout: Brepols, 2011), 99–126, 109–10; Isabel Devos, Thijs Lambrecht and Richard Paping, 'The Low Countries, 1000–1750', in Eric Vanhaute, Isabelle Devos and Thijs Lambrecht (eds.), *Rural Economy and Society in North-Western Europe: Making a Living: Family, Income and Labour, 500–2000* (Turnhout: Brepols, 2011), 157–84, 168.

⁸³ Elise van Nederveen Meerkerk and Richard Paping, 'Beyond the census: Reconstructing Dutch women's labour force participation in agriculture in the Netherlands, ca.1830–1910', *History of the Family* 19 (2014), 447–68, 461–63.

 ⁸⁴ Piet van Cruyningen, 'Female labour in agriculture in Zeeland in the eighteenth century', *Tijdschrift voor sociale en economische geschiedenis* 2 (2005), 43–59.

and provided an essential part of the harvest workforce. Gullickson describes how 'men, women and children poured into the fields in late July for six weeks of work cutting, gathering, binding, and transporting the grain to the peasants' barns'.⁸⁵ Verdon also emphasizes the seasonal nature of women's employment as day labourers in England, where they were most likely to be employed in weeding, hay making and harvesting in spring and summer.⁸⁶ Farm service, for both men and women, was in decline in late-eighteenth century England, but persisted on smaller farms in the west and north of the country.⁸⁷

There is scattered evidence for earlier periods. Robert Loder ran a large farm of around 60 hectares of arable and 40 hectares of pasture in central southern England in the early seventeenth century. His most profitable crop was barley which he grew and malted for the London brewing trade. Loder employed five farm servants, three men and two women, as well as a male shepherd to care for his sheep flock, each year between 1610 and 1620. His female servants' main responsibility on the farm was malting barley, but they also made hay, helped in the harvest, milked cows, picked fruit and travelled to market to sell cherries and apples.⁸⁸ Henry Best farmed in East Yorkshire in the same period. With a farm of over 145 hectares of arable and 40 hectares of pasture, he employed more servants: eight men and two women, as well as two full-time male workers to care for his sheep and beef cattle. The male servants ploughed, sowed crops, mowed hay, loaded and drove carts and took produce to market. The female servants milked the 14 cows and were responsible for washing, brewing and baking – helping to care for the male workforce.⁸⁹ Best employed other labourers paid by the day or task to wash and shear sheep, harvest hay, corn and peas and to thresh corn. His detailed descriptions make it clear that women were employed in both the hay and corn harvest.⁹⁰ Lambrecht shows that the employment of servants in farming households was common in sixteenth-century Flanders. In Watervliet, a village of large farms in the polder region, 20 per cent of households employed servants in 1544, and 23 out of 56 servants listed were female. In contrast in Beveren, a larger village of smaller family farms outside Antwerp, 13 per cent of households had servants and half of the 80 servants listed were female.⁹¹

⁸⁶ Verdon, *Rural Women Workers*, 55–61. ⁸⁷ Verdon, *Rural Women Workers*, 77–83.

Jane Whittle, 'Servants in rural England, c.1450–1650: Hired work as a means of accumulating wealth and skills before marriage', in Maria Ågren and Amy Louise Erickson (eds.), *The Marital Economy in Scandinavia and Britain 1400–1900* (Aldershot: Ashgate, 2005), 89–107, 92–93.

⁹¹ Lambrecht, 'Institution of service', 40.

⁸⁵ Gay L. Gullickson, Spinners and Weavers of Auffay: Rural Industry and the Sexual Division of Labor in a French Village, 1750–1850 (Cambridge: Cambridge University Press, 1986), 31.

⁸⁹ Whittle, 'Servants in rural England', 91–92.

⁹⁰ Roberts, 'Sickles and scythes', 9–10; Woodward (ed.), *Henry Best*, 34–39 (haymaking), 45–62 (grain harvest).

In this highly commercialized part of Europe, as elsewhere, the rural landscape was a patchwork of different farms types. Areas dominated by arable or livestock farming, or with large or small farms lay side by side and existed in symbiotic relationships. Areas of rural industry were scattered throughout, providing an alternative source of income, particularly from hand spinning – almost always a female occupation. Further, the rural economy was profoundly affected by the presence of large cities, which offered not only a market for agricultural produce, but also employment for rural migrants. Add economic change over time to this picture and it is evident that, while common patterns existed in the types of work available (or considered suitable) for women, the range of opportunities available to particular women at particular times and places varied significantly.

Two Case Studies

The variety of agricultural systems and gendered work patterns within Europe is best illustrated through detailed case studies. This allows the range of work tasks undertaken by rural households to be appreciated, as well as the wider economic context in which these households existed. Here we present the two contrasting agricultural systems of Norway and south-west England. In Norway, subsistence agriculture, undertaken by women, was combined with men's work in other areas of the economy. In England, agriculture was highly commercialized and men did more agricultural work than women. Nonetheless, women were still an essential part of the agricultural workforce.

Norway

Neither 'plough agriculture' nor 'male-dominated agriculture' grasps the essence of the early modern Norwegian household economy. If economists seriously want to study causality rather than correlation they should as a first step acknowledge that early modern households relied on women's physical strength, trustworthiness and responsibility and not label these as male assets. Obviously, studies such as those by Alesina et al. are not based on sources that historians use to research men's and women's work. Norwegian historians have used court records, accounts and tax lists as well as traces of material culture to explain how households used a gender division of work to eke out a living in Europe's high north.⁹²

Agriculture was a precarious form of survival in early modern Norway. The yield of oats and barley was only 1:5, and harvest was once a year. The 90 per

⁹² Ann Kristin Klausen, *Helgelands historie*, Band 3 1537–1800 (Mosjøen: Helgeland historielag, 2011), 63–84.

cent of the population who lived in the countryside managed to produce two thirds of the grain needed. The remaining third had to be imported and, since the Middle Ages, Norway had relied on the grain trade of northern Europe. Until 1550 mainly the Hansa imported grain from the Baltic in exchange for stock fish and other products. Later, Danish, Dutch and British merchants traded grain from Denmark and the Baltic. Early modern Norway exported stock fish, timber, deal,⁹³ copper and iron to pay for import of grain. The producers of all these export goods were farmers who did this work during the winter and when agricultural labour was not needed. The gender division of labour at household level made this way of making a living possible. This household combination of many trades (mangesysleriet) is well known from studies of early modern household economy all over Europe. The many combinations in Sweden are demonstrated in research based on the verboriented method.94 The household combination of trades relied on the hard work of all household members, and creativity to find new ways of making a living and to balance the workload throughout the year.

The Norwegian fisher/farmer households along the coast north of Trondheim provide a good illustration: in January almost all men and boys from the communities, five to six to each open boat, sailed and rowed 500 km north to the fishing grounds in Lofoten, fished for about six weeks, prepared and hung up the fish for drying, and then returned home in March. In May/June some of the men sailed north with bigger ships to collect the dried fish and then travelled to Bergen (2,000 km away) with the stock fish to be sold to merchants, before returning back home again (1,500 km) with the grain they had purchased. In between these journeys they took part in working the fields and collecting fodder. Arable agriculture and raising livestock in this part of Norway were mainly women's work and mainly for direct subsistence needs. The combination of agriculture, livestock, commercial fishing and home-fishing for subsistence relied on the hard experience that one of these strands of livelihood could fail, but seldom all. And if the worst should happen – that the men did not return from the sea – the household could survive on the farm.⁹⁵

Commercial cod-fishing during summer along the southern coast of Norway remained undeveloped due to lack of salt to preserve cod; the salt was used for commercial herring conservation. But in the eighteenth century, merchants solved the salt problem and commercial cod-fishing during the summer became possible. In the north, men were fishing for herring, coalfish, halibut, cod and ling during summer. As a consequence, arable agriculture and livestock farming relied even more heavily on women, who in some districts were

⁹³ Planks of sawn pine timber. ⁹⁴ Ågren (ed.), *Making a Living*.

⁹⁵ Arnved Nedkvitne, 'Mens Bønderne seilte og Jægterne for': Nordnorsk og vestnorsk kystøkonomi 1500–1730 (Oslo: Universitetsforlaget, 1988), 592.

also engaged in preserving clip fish and salting cod and herring. In all fishing communities the making and preparation of textiles and food for the long fishing-journeys was women's work. All resources depended on the season and had to be allocated at the right time. Harvesting and collecting eggs and down happened at the same time as the important coalfish and herring fishing took place. In the high north, seasons also meant the shift between light and lack of light: midnight sun lasted from May to July and then the Polar night from November to January. Two classic, much quoted Norwegian studies for the nineteenth century illustrate the work year that emerged in the eighteenth century for the fishing/farmer households when men were fishing all year round and women did much of the farm work (see Table 3.1).

The adaptation of Norwegian pre-industrial households to international trade relied on the effective use of all natural resources and all household members as workforce. As well as fish-products from the coastal areas, fur and berries were exported. From the inland regions in eastern and southern Norway timber was exported to England, Scotland and the Netherlands and mineral products came from copper mines, ironworks and silver mines. The workforce in forestry and the transport of minerals was made up of male farmers who used the low season in agriculture to participate. Miners in some parts of the

Troms, Karlsøy, Nineteenth Century ^a								
Months	Fishing	Farm						
January–April April–May June	Lofoten (cod) Capelin Greenland shark	Feeding cattle with kelp and hay Spading, tilling field, sowing Cutting peat, making cod liver oil						
July–August September–October November–December	Coalfish Herring	Harvesting, haymaking, collecting eggs and down Potato harvest Preparing food, equipment for fishing at Lofoten						
Sogn og Fjordane, Nineteenth Century ^b								
Months	Fishing	Farm						
January–AprilCod and herringMayTo BergenJune–JulyCoalfishAugust–SeptemberHerringOctober–December		Feeding cattle with kelp and hay Spade-tilling field, sowing Cutting peat Harvesting, haymaking Preparing food, equipment for winter fishing						

Table 3.1. Annual work routines in nineteenth-century Norway

Sources:

^aHåvard Dahl Bratrein, *Drivandes kvinnfolk, om kvinner lønn og arbeid* (Tromsø: Universitetetsforlaget, 1976), 23.

^bKarl Egil Johansen, *Fiskarsoga for Sogn og Fjordane 1860–1980* (Bergen: Universitetetsforlaget, 1982), 58–73.

country relied on a small farm (enabling them to survive when the mines were not working), while in other parts mining took the form of wage labour only, leaving workers exposed to market crises.

Preindustrial livestock farming and arable agriculture were hard work. Only 3 per cent of land in Norway was suitable for arable farming and, during the early modern little ice age, cold and wet summers, hailstorms and early snow could ruin a harvest. However, grain was produced wherever possible. To make more out of small farms, households from the west coast in the eighteenth century started cultivating the soil with spades rather than ploughs. While very labour intensive, this gave a slightly higher yield. In some of these districts, potato was introduced, but was not in common use in Norway until the early nineteenth century. The combination of agriculture and livestock relied on transhumance. Scarcity of farmland required extensive use of all other types of land and resources for fodder. Cattle, sheep and goats were taken up to the mountains before Midsummer Eve (23 June). During the summer any household members available, male and female, took part in haymaking, fodder collection and harvest close to the farmhouse; while women, often daughters, trusted servant maids or wives, took care of the animals and produced butter and cheese on summer farms at 1,000 m above sea level. Small farms meant even more work to make a living. Fodder had to be carried a long distance and on the many small farms this was done without horses. For the emerging class of cottars who rented small plots of land from farmers, the workload was even heavier. They had to work both the farmer's land as well as their own plots during the few summer weeks. The amount of work varied and was less in the western regions. An account book from one big farm in eastern Norway relates the heavy work of cottar women: in addition to the summer work in the fields and subsequent harvest, they had to spin and weave for the farmer and, when cheap foreign cotton undercut homemade flax, the cottar women were ordered to dig ditches in the heavy clay fields.96

The state government added to the households' burdens. Norway was under Danish rule until 1814 and the state took about 10 per cent of production in taxes and fees. In addition, the state took the workforce. Half of all young men under 30 were under military command, in the army or navy. The effect of this burden varied with war and peace. The long seventeenth century was the hardest: six wars between Sweden and Denmark in the period 1563–1720 were followed by a long peace period for Denmark–Norway until 1807. Many civil servants under Danish rule noticed the Norwegian gender division of labour and described it in eighteenth-century periodicals and reports. From Ørlandet at the coast of Mid-Norway the official Christen Pram wrote in 1804 in his report to the Department of Commerce in Copenhagen:

⁹⁶ Anna Tranberg, "'Ledighed taales ikke": Plassfamilier på gardsarbeid', *Historisk Tidsskrift* 69 (1990), 512–36.

'The men do little and unwilling to do rural work, that becomes women's work, while the men fish and tend their fishing equipment and boats.'⁹⁷ The vicar of Lofoten, Erik Andreas Colban, reported much the same in his topography *Forsøg til en beskrivelse over Lofoden og Vesteraalens Fogderi* (Trondheim 1818). It is therefore not surprising that the 1820s tax-committee concluded without any hesitation that the workforce required at farms along the northern coast was 0.1 of a man's work year and 1.0 of a woman's. The committee also stipulated this as the norm. The committee based their calculation on the amount of arable land, cattle and horses. Lack of arable land and horses on the northern farms explains in part why the male workforce was so low. For inland farms in southern Norway with more arable land, more cattle and horses, the committee stipulated a workforce of three male and three female work years.⁹⁸

The perspective of gendered household work has dominated studies of the early modern Norwegian economy.⁹⁹ Studies of the gender division of labour and households' allocation of time and resources have contributed to a better understanding of the whole economy. Yet the modernization perspective dominates the volumes on the early modern period and the nineteenth century in the Norwegian Agrarian History (2002).¹⁰⁰ Compared to modern agriculture methods, neither low-yielding small cows nor spade-tilled smallholdings holds any historical interest. In these volumes, female-dominated farming is devalued in much the same way as civil servants devalued it in the eighteenth century. The lack of gender perspective leads to narratives about men's dilemmas in choosing farming or fishing, neglecting the evidence of the household's division of work. Women in the fields are mentioned only as peculiarities. For instance, Lunden relates how, because the plough could not turn in small fields, women had to carry the plough round 'to spare the horse'.¹⁰¹ A closer look shows that the source for this passage is an anecdotal note from the nineteenth century which records that the plough driver might have with him 'a man or a woman' to carry the light plough round at the end of the field: the point being made was that ploughs were 'not heavier' in those days.¹⁰²

⁹⁷ Gerd Mordt, *Christen Prams rapporter fra Norge* (Oslo: Kildeutgivelser fra Riksarkivet, 2019), 199. See also 203. Travel reports to the Department of Commerce in Copenhagen in 1804.

⁹⁸ Stein Tveite, 'Kvinner i norsk bondesamfunn og bondenæring', *Jord og gjerning. Årbok for norsk landbruksmuseum* (Oslo: Landbruksforlaget, 1988).

⁹⁹ Tranberg, 'Ledighed taales ikke'; Tveite, 'Kvinner i norsk bondesamfunn og bondenæring'; Ståle Dyrvik, Anders Bjarne Fossen, Edgar Hovland and Stein Tveite, Norsk økonomisk historie, Band 1 1500–1800 (Oslo: Universitetetsforlaget, 1979); Sølvi Sogner, Far sjøl i stua og familien hans (Oslo: Universitetsforlaget, 1990).

¹⁰⁰ Norsk landbrukshistorie, Band 2 and 3 (Oslo: Det Norske Samlaget, 2002).

¹⁰¹ Kåre Lunden, Norsk landbrukshistorie, Band 2 (Oslo: Det Norske Samlaget, 2002), 164.

¹⁰² Valen-Sendstad, Norske landbruksredskaper.

South-West England

South-west England had an estimated population of around 850,000 in 1600.¹⁰³ Both Snell and Sharpe have argued that the south-west had particularly favourable employment prospects for women in the early modern period. Cloth was produced for international markets in all of the counties except Cornwall and Dorset, providing plentiful employment for women in spinning; and there were specialist textile industries such as lace-making in east Devon, which was dominated by women.¹⁰⁴ The western portion of this region was dominated by small pastoral farms. However, the region encompassed a great deal of variety. Farming types ranged from cattle and sheep rearing in the uplands of Devon and Cornwall, stock fattening in the Somerset Levels and dairying in east Devon, west Dorset and north-west Wiltshire, to arable farming in the clay vales of Devon and Somerset and sheep-corn farming in the chalk lands of Dorset, Wiltshire and Hampshire.¹⁰⁵ Mid-nineteenth-century Parliamentary reports offer detailed descriptions of women being employed as day labourers in arable agriculture in all the south-western counties.¹⁰⁶

To explore early modern agriculture, two main sources are used here. First, household and farm accounts kept by members of the gentry and wealthy farmers provide evidence of wage labour. Secondly, incidental and contextual evidence from witness statements and confessions in various courts provide evidence of work tasks carried out by a broad cross-section of the population, including unpaid labour and work on small family farms.¹⁰⁷ Wage accounts from south-west England have been studied by Speechley, Dudley and Sharpe. Speechley analysed nine sets of farm accounts from Somerset dating from 1682 to 1871; Dudley three sets of household accounts from Devon, Somerset and Hampshire dating from 1644 to 1700; while Sharpe looked at two sets of

¹⁰³ Defined here as the counties of Cornwall, Devon, Dorset, Hampshire, Somerset and Wiltshire; county population estimates from S. Broadberry, B. M. S. Campbell, A. Klein, M. Overton and B. van Leeuwen, *British Economic Growth 1270–1870* (Cambridge: Cambridge University Press, 2015), 25.

 ¹⁰⁴ Pamela Sharpe, Population and Society in an East Devon Parish: Reproducing Colyton, 1540–1840 (Exeter: Exeter University Press, 2002), 93; Pamela Sharpe, 'Lace and place: Women's business in occupational communities in England, 1550–1950', Women's History Review 19 (2010), 283–306.

 ¹⁰⁵ Joan Thirsk, England's Agricultural Regions and Agrarian History, 1500–1750 (Basingstoke: Macmillan, 1987), especially 28–29; Avice R. Wilson, Forgotten Harvest: The Story of Cheesemaking in Wiltshire (Calne: Avice Wilson, 1995); Patricia Croot, The World of the Small Farmer: Tenure, Profit and Politics in the Early Modern Somerset Levels (Hatfield: University of Hertfordshire Press, 2017); Speechley, 'Female and child', 50–55.

 ¹⁰⁶ Ivy Pinchbeck, Women Workers in the Industrial Revolution, 1750–1850 (London: Frank Cass, 1969), 90–91; Verdon, Rural Women Workers, 55–59.

¹⁰⁷ Evidence was taken from quarter sessions (county level criminal courts) examinations, church court depositions and coroners' reports dating from 1500 to 1700. For more details see Whittle and Hailwood, 'Gender division of labour'.

accounts from Cornwall (1673–1714) and Devon (1790s).¹⁰⁸ Speechley found that women undertook 20 per cent of days worked by day labourers on the Somerset farms she examined but undertook a wide range of tasks.¹⁰⁹ Dudley's findings were almost identical, with payments to female workers accounting for 20 per cent of day and task wages paid.¹¹⁰ Women's wages were low. Both Speechley and Dudley found that women's wages were on average half those paid to men.¹¹¹

Witness statements from courts were used to construct a dataset of 4,300 work tasks, where each task was specified and carried out by a particular person. In total, 29 per cent of work tasks recorded were undertaken by women. Analysis showed that the low proportion of women's work tasks was due to courts preferring male witnesses and the fact that both men and women were more likely to describe work tasks carried out by members of the same gender. Given that all forms of work were recorded, including care work and housework, and no historical evidence supports the idea that women had more leisure than men, an adjusted figure was calculated and is provided as well as the raw data in the following discussion. The adjusted figure assumes that 50 per cent of the total work tasks recorded were undertaken by women and thus multiplies the number of female work tasks recorded by 2.41. The adjusted figures are a more accurate reflection of women's participation in work tasks than the unadjusted figures, which mirror the prejudices of the early modern legal system.¹¹²

A total of 1,077 work tasks related to agriculture and forestry were recorded, of which 19 per cent (raw totals) or 37 per cent (adjusted totals) were carried out by women. Tasks involving agriculture and land management made up 21 per cent of work tasks carried out by women, the same proportion as housework. These were the two most common categories of work undertaken by women, followed by buying and selling (18 per cent), care work (11 per cent) and craft production (9 per cent).¹¹³ Tables 3.2 and 3.3 show the types of agricultural tasks undertaken by men and women in south-west England recorded in the dataset, divided into arable and pastoral tasks. Women were engaged in a wide range of tasks but a distinct gender division of labour is

- ¹¹⁰ Dudley, 'Women's waged work', 32.
- ¹¹¹ Speechley, 'Female and child', 116; Dudley 'Women's waged work', 164-67.
- ¹¹² For more on the methodology see Whittle and Hailwood, 'Gender division of labour', 11–13.
- ¹¹³ Whittle and Hailwood, 'Gender division of labour', 12, 15.

¹⁰⁸ Speechley, 'Female and child'; Imogene Dudley, 'Evidence of women's waged work from household accounts 1644–1700: Three case studies from Devon, Somerset and Hampshire', unpublished PhD thesis, University of Exeter, (2020); Pamela Sharpe, 'Time and wages of West Country workfolks in the seventeenth and eighteenth centuries', *Local Population Studies* 55 (1995), 66–68.

¹⁰⁹ Speechley, 'Female and child', 57. On particular farms the proportion of women's labour varied from 1 per cent to 42 per cent.

	Total	Male	Female	Female (%)	Female adj.	Female (%) adj.
Prepare ground	103	96	7	6.8	17	15.0
Digging marl/earth	13	11	2	15.4	5	31.3
Sowing	14	9	5	35.7	12	57.1
Weeding	14	1	13	92.9	31	96.9
Grain harvest	181	158	23	12.7	55	25.8
Other field work	12	10	2	16.7	5	33.3
Threshing	42	40	2	4.8	5	11.1
Winnowing	16	4	12	75.0	29	87.9
Total	395	329	66	16.7	159	32.6

Table 3.2. Arable agriculture, south-west England, 1500–1700

Table 3.3. Pastoral agriculture, south-west England, 1500–1700

	Total	Male	Female	Female (%)	Female adj.	Female (%) adj.
Milking	56	3	53	94.6	128	97.7
Cattle: other	46	40	6	13.0	14	25.9
Horses	28	22	6	21.4	14	38.9
Sheep: keeping	44	44	0	0.0	0	0.0
Sheep: shearing	47	36	11	23.4	27	42.9
Sheep: marking	23	22	1	4.3	2	8.3
Sheep: other	25	21	4	16.0	10	32.3
Pigs	5	2	3	60.0	7	77.8
Hay harvest	71	57	14	19.7	34	37.4
Providing fodder	4	4	0	0.0	0	0.0
Dairying	7	0	7	100.0	17	100.0
Total	356	251	105	29.5	253	50.2
Total w/o milk and dairy	293	248	45	15.3	108	30.3

nonetheless visible. In arable agriculture women dominated weeding and winnowing and made up a significant proportion of those sowing crops. They made up around a third of those digging and doing 'other field work' but were a smaller proportion of those carrying out the three most common tasks: preparing the ground (mostly ploughing), harvesting and threshing. Nonetheless, because the grain harvest required so much labour, this was also the most common agricultural task undertaken by women. In pastoral agriculture the division between men's and women's work was more distinct. Women did all the dairying and almost all of the milking; they commonly worked as sheep shearers, in the hay harvest and in care of horses. They also cared for sheep and cattle but never worked as shepherds. Smith, in a study of late sixteenth-century agricultural labour in eastern England, argued that 'men's and women's work was "sexually exclusive"": men and women did completely different tasks.¹¹⁴ Tables 3.2 and 3.3 show little evidence of gender exclusivity. Only a few tasks were exclusive to women or men and a few were shared roughly equally but most commonly tasks were done mainly by women or men. This is illustrated by looking in turn at the various tasks that made up arable and pastoral agriculture.

Most arable land was prepared for crops by ploughing and most ploughing was done by men. However, it was not unknown for women to plough. In a 1551 tithe case from the church courts, Margaret Parsons of Western Zoyland in Somerset stated that she 'being then servant ... did both help to plough ... & sow ... with barley ... [and] to reap the said corn' in a seven acre field.¹¹⁵ However, she is the only example of a woman ploughing in the dataset. More commonly, women participated in other activities that prepared the soil for crops. Pinchbeck notes that 'from early times' women had worked at 'todding' (turning sods that had been pared and burnt) on waste ground that was being brought into cultivation.¹¹⁶ In two different cases from late sixteenthcentury Devon women were recorded 'burning beat' and 'righting beat' ('beat' being rough sod from heathland with vegetation attached), which appears to be a similar form of work.¹¹⁷ Women were paid for 'beating' at Antony in Cornwall in the seventeenth century, which is surely the same process.¹¹⁸ Women also prepared heavy clay soil for sowing by 'balling' or 'clotting' lumps of earth into smaller pieces. A Somerset woman was working 'balling' barley land in 1584 when she agreed to marry her fellow worker.¹¹⁹ Similarly female labourers were paid for 'clotting' at Leyhill in Devon in the mid-seventeenth century.120

Women were actively involved in sowing crops. Pinchbeck thought that women's work sowing or 'setting' peas and beans was an innovation of the late-eighteenth century but earlier evidence also exists.¹²¹ In 1659, a married

¹¹⁵ Somerset Record Office, D/D/Cd/6, pp. 236–38. ¹¹⁶ Pinchbeck, Women Workers, 53.

¹²⁰ Dudley, 'Women's waged work', 105, 158. ¹²¹ Pinchbeck, *Women Workers*, 60.

¹¹⁴ A. Hassell Smith, 'Labourers in late sixteenth-century England: A case study from north Norfolk [Part II]', *Continuity and Change* 4 (1989), 367–94, 377.

¹¹⁷ Devon Heritage Centre: Chanter 859, fol. 39r–39v. (Chudleigh, 1575); Chanter 864, fol. 12v– 12a.r (North Petherwin, 1593).

¹¹⁸ Sharpe, 'Time and wages', 66.

¹¹⁹ Somerset Record Office, D/D/Cd/20, fol. 44r-44v (Brean, 1584).

woman from Dorset worked alone, planting beans in a field; while at Rockbeare in Devon in 1661 a widow was employed for wages to 'set peas in the ground'.¹²² Dudley finds women being paid to set beans in seventeenth-century Devon and Hampshire.¹²³ Women also sowed grain: two women were among a family group who were sowing corn in a field at Shute in Devon in 1672, just as Margaret Parsons had done in mid sixteenth-century Somerset.¹²⁴

Weeding arable crops had been a common form of women's agricultural work in England since the medieval period.¹²⁵ Female weeders appear commonly in wage accounts and frequently among the work tasks in the database. Dudley found weeding made up 34 per cent of the days worked by female labourers at Herriard Park in Hampshire in the late seventeenth century and it was the most commonly specified farm task undertaken by women at Leyhill in Devon and Barrow Court near Bristol.¹²⁶ Female weeders typically worked in groups and normally on other people's land, suggesting this was work women often undertook for wages. For instance, court cases record five women working with 'diverse others' at Broadclyst in Devon in 1617; three women weeding fields belonging to the father of one of them at Instow in Devon in 1633; and three women weeding together at Bradford on Tone in Somerset in 1676.¹²⁷

Evidence from south-west England confirms that only men mowed with a scythe, but that reaping with a sickle was a mixed activity.¹²⁸ The adjusted figures in Table 3.2 show that women made up 35 per cent of those reaping with a sickle, and only 26 per cent of those undertaking tasks in the grain harvest more generally. This indicates that, even when the sickle was used, women did not do the majority of harvest work in south-west England in this period. The final arable farming process in which women had a strong presence was winnowing – separating the grain and chaff after it had been threshed. Winnowing seems to have typically been done alone or in pairs, often in the street. Cases of women winnowing are found from all over the region, including one case from 1675 of a newly-married Somerset woman winnowing to pay off a seven-shilling debt incurred by purchasing a bed.¹²⁹

¹²² Somerset Record Office: Q/SR/98 (Beaminster (Dorset), 1659); Devon Heritage Centre: Chanter 868 (Rockbeare, 1661).

¹²³ Dudley, 'Women's waged work', 93–94, 158.

¹²⁴ Devon Heritage Centre: Chanter 875 fols. 153v–158v (Shute, 1672).

¹²⁵ Pinchbeck, Women Workers, 61. The Luttrell Psalter, an illuminated manuscript dated 1320–40, has an illustration of women weeding crops.

¹²⁶ Dudley, 'Women's waged work', 93, 105, 111.

¹²⁷ Devon Heritage Centre: Chanter 867 (Broadclyst, 1617); Chanter 866 (Instow, 1633); Somerset Record Office: D/D/Col/97, fols. 66–76v (Bradford-on-Tone, 1676).

Roberts, 'Sickles and scythes'.

¹²⁹ Somerset Record Office: D/D/Cd/106, fols. 70–71v (Nailsea, 1675).

Turning to pastoral agriculture we find that milking and dairying were dominated by women.¹³⁰ In this period there was no male equivalent of a dairymaid – the female servant employed on most large farms to milk and make cheese. The court records dataset recorded many instances of milking, of which only three related to men: all these were ambiguous. Two men were described as accompanying women to and from milking, making it unclear who actually did the work, while in 1670 William Ridwood of West Pennard in Somerset was described as living 'by his labour and doth milk two cows'. It is possible this was a description of his household economy rather than his actual work activity.¹³¹ No men were described as making butter or cheese. This was an activity in which women could have some independence: two different women in early seventeenth-century Somerset were described as running dairies that were some distance from the main farm, provided with their own accommodation.¹³²

It is less clear the extent to which women's responsibility stretched into caring for cattle and other livestock in the pastoral economy. Wage accounts rarely record women engaged in this type of work: in the three sets of household accounts studied by Dudley she found that between 91 and 97 per cent of the agricultural tasks performed by women as day labourers concerned field work and not care of livestock.¹³³ The court case dataset contains a handful of cases of women turning cattle out into fields, feeding cattle, and droving cattle, but they are greatly outnumbered by examples of men doing these tasks. A similar pattern is found with horses and sheep. While agricultural advice literature from the early modern period described the care of horses as a male task, women rode horses and are recorded catching and leading horses and cleaning out stables. There were no instances of women 'keeping' sheep (the female shepherds as imagined by Voigtlander and Voth), but women did drove and wash sheep. Women also worked as sheep-shearers: there were 11 instances of women shearing sheep from five different court cases, four from Devon and one from Somerset. Most of these women were described as married and all were working for other people. A tithe case from Devon recorded Anne Josse and Wilmota Smallridge who 'did shear ... yearly 50 sheep' for one Westcott of Holcombe Burnelle, three years in a row from 1632 to 1634.¹³⁴ There are scattered references to female sheep-shearers elsewhere in England: Goldberg cites it as a common employment for women

¹³⁰ Deborah M. Valenze, 'The art of women and the business of men: Women's work and the dairy industry, c.1740–1840', *Past & Present* 130 (1991), 142–69.

¹³¹ Willshire and Swindon Heritage Centre: D1/42/30 (Potterne, 1615); Somerset Record Office: D/D/Cd/75 (Wembdon, 1632); D/D/Cd/93, fols. 119v-130, 140v-146 (West Pennard, 1670).

¹³² Somerset Record Office: Q/SR/33 (Burnham, 1615); D/D/Cd/36 (Stenning, 1605).

¹³³ Dudley, 'Women's waged work', 91, 105, 111.

¹³⁴ Devon Record Office, Chanter 866, pp. 22–23.

in fifteenth-century Yorkshire, while Clark provides examples from early modern Sussex and Norfolk.¹³⁵

The hay harvest that provided fodder for livestock was a mixed activity. Men mowed the hay crop while both women and men made hay (raking and turning hay to dry it in the fields). Along with weeding and harvesting corn, hay-making was one of three most common activities which women were paid for as day labourers; these three activities were also some of the most common forms of women's agricultural work in the court case dataset, along with milking, winnowing, and sheep-shearing. Looking in detail at work tasks allows us to move beyond generalization about the gender division of labour. It becomes clear that some processes within both arable and pastoral agriculture were dominated either by women or men.

Conclusion

Historically, some farming systems which did not use the plough were dominated by women, such as those of sub-Saharan Africa.¹³⁶ However, although women are only occasionally recorded using the plough, the presence of 'plough agriculture' in Europe did not lead to women being excluded from agricultural work and confined to the home as Alesina et al. argue. The examination of the gender division of labour in European agriculture in this chapter suggests five main reasons why this was the case. First, European agriculture was a mixed system in which any arable production using ploughs relied on animal husbandry to provide manure: farming never consisted only of ploughing. Secondly, European agriculture was highly varied: although grains were the staple crop, crops and livestock differed a great deal by region and required different forms of farming. Thirdly, women provided a significant proportion of agricultural labour. Fourthly, even within arable agriculture women commonly contributed to essential tasks such as sowing, weeding and harvesting crops. Finally, it should be noted that women did sometimes till the soil, using ploughs (which varied regionally in size and weight), and spades, as we have seen from the Norwegian case study.

This chapter has explored the variety of agricultural systems and the roles of women and men within them. We have argued that mono-causal explanations cannot account for the wide range of gendered work patterns found within these systems. These ranged from the circumstances discussed in our two case studies where women dominated agriculture, as in Norway, or provided a

¹³⁵ Goldberg, Women Work and Life-Cycle, 139, 244, 291, 296–97; Alice Clark, Working Life of Women in the Seventeenth Century (London: Rouledge & Kegan Paul, 1982 [originally published 1919]), 62.

¹³⁶ Ester Boserup, *Women's Role in Economic Development* (London: Earthscan, 1970), ch. 1.

significant part of the workforce, as in south-west England. There were also regions where women did little agricultural work, as in eighteenth-century central Spain, as discussed by Carmen Sarasúa in Chapter 4.

Women's competence as farm managers and workers is demonstrated by their ability to run farms when men were absent working elsewhere or in military service or after their husband's death.¹³⁷ Even in regions where women on average did less agricultural work than men, as in England, the sheer quantity of work required for agricultural production meant that agricultural work made up an important part of women's work repertoires. When early modern women living in the countryside were not agricultural workers this was typically because they were engaged in other forms of more profitable work, for instance textile production or petty marketing in the countryside. Most rural households could not afford to support adults who did not generate an income and even wealthier households in this period showed very little sign of adhering to an ideal of wives who did only unpaid housework and care-work. The gender division of labour in agriculture was not fixed but flexible and was adjusted to meet particular circumstances. Models proposed by historical economists based on an unchanging gender division of labour are historically inaccurate: they perpetuate myths without examining the historical evidence. Women formed a crucial part of Europe's agricultural workforce throughout the pre-industrial period.

¹³⁷ For women farming as widows, see Jane Whittle, 'Enterprising widows and active wives: Women's unpaid work in the household economy of early modern England', *The History of the Family* 19 (2014), 283–300.