## The Formation of a Female Labor Force in the Rice Fields

## The Italian Rice Belt

The basin of the Po River is the most extensive in Italy. It consists of a broad plain that occupies a large portion of the northern part of the country. The 405 mile-long river has its source in Monte Viso in the west and its mouth in the Adriatic coast in the east.

The establishment of rice farming in the Po valley transformed its economy and society. The investment of huge amounts of capital in this crop revolutionized agriculture and led to the formation of a mass of landless agricultural workers. The changes brought about in the life of the Po valley were enormous, and the years from the introduction of rice growing in the second half of the fifteenth century to the end of the 1800s provide the background from which the workers in the rice fields mobilized in the twentieth century.

Around 1450, farmers in the present province of Milan became the first to sow rice in western Lombardy. Here many generations had worked to level the plain, drain swamps, and regulate the flow of water. Land reclamation started in pre-Roman and Roman times, decayed with the fall of the Roman empire, and was resumed in the later Middle Ages. However, in the fifteenth century vast surfaces still remained under stagnant water; these otherwise disregarded, mar-

ginal tracts of estates were good for planting rice.<sup>2</sup> Rice farming then spread west from the Milan region (Milanese) across the Ticino River, one of the many Po tributaries, to Lomellina, which is part of the Lombard province of Pavia, and to the present Piedmontese provinces of Vercelli and Novara.<sup>3</sup> In the nineteenth century, Lomellina, Vercelli (Vercellese), and Novara (Novarese) became, and are still today, the principal rice-growing regions in Italy. At the turn of the century the economic supremacy of the Italian rice belt was unsurpassed in Europe, outstripping even Valencia, the major rice-growing province in Spain.

Originally, only a few peasants went to the marshes, sometimes by boat, to sow and reap "the treasure of the swamps"—a popular name for rice used by sixteenth-century writers—but they deserted the area for the rest of the season. 4 Conditions had changed by the end of the fifteenth century. The search for profit motivated farmers to grow rice not only in swampy soil, but also in the best irrigated fields of their holdings, and it displaced other popular grains like wheat. By 1550 the largest surfaces under rice cultivation in the Milanese were irrigated fields, not marshes. 5

The expansion of rice growing went hand in hand with land improvement, canal construction, and the capitalistic transformation of agriculture in the western section of the Po valley. Since the early 1400s capital investment had been significant in the duchy of Milan as investors from the duchy and elsewhere had begun to rent the farms of impoverished landowners who lacked the necessary means to work their own land, particularly those belonging to members of the old nobility and the church. A new class of capitalist farmers (affittuari; sing. affittuario) promoted this change. Encouraged by high agricultural prices and the increasing demand for food by the swelling population of the cities in the fifteenth and sixteenth centuries, they were the main agents behind rice promotion and agriculture in general in the Po valley.<sup>6</sup> They helped to consolidate scattered tracts and thus erased some vestiges of the feudal order and also drained more fens, dug more waterways, and reclaimed more arable land.<sup>7</sup>

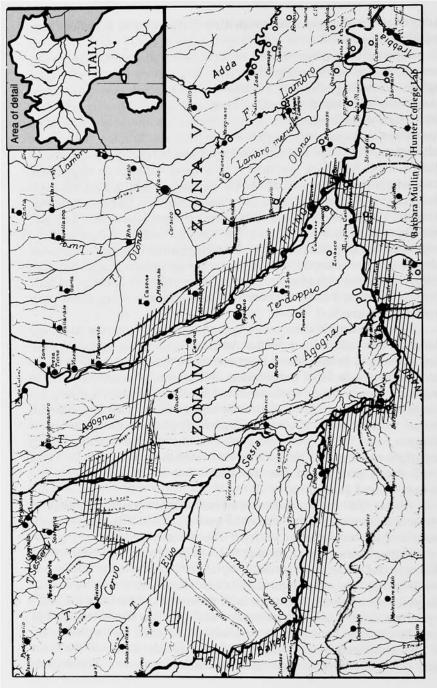
The same developments took place west of the Ticino (in Vercelli, Novara, and Lomellina) in the seventeenth century.<sup>8</sup> Though the canal network expanded at a slower rate there than in the Milanese, it occurred in a larger scale<sup>9</sup> as the crop prospered. Early censuses, which were unreliable in many ways, showed a rapid rate of expansion interrupted by the economic slump of the first half of the seventeenth century. But the recession, which lasted until 1650,

brought about changes that molded rice farming into a modern capitalistic enterprise.  $^{10}$ 

Rice farming concentrated in a process that involved three factors: (1) many small landholders who had grown rice in a broader region, including western Piedmont, abandoned rice cultivation, sometimes because their lands were not suitable for it; (2) some cultivators went bankrupt in hard times; (3) some stopped sowing rice when governments began to restrict the surface under rice cultivation. Capitalist farmers preferred larger tracts over small and middle-sized holdings, because it was more difficult to implement complex crop rotation and utilize the complicated hydraulic methods that rice growing required on the smaller tracts. 11 The few peasants who still tilled their own small holdings owned land either in poor, infertile regions or in low areas vulnerable to flooding, where artificial irrigation was impractical. 12 Rice farming gradually became the most advanced form of capitalist farming in the peninsula. Capitalist agriculture made inroads in other rural areas in northern and central Italy after unification, but even then the Mezzogiorno, or southern part, remained untouched. 13

Rice growing also began to spread eastward from the Milanese along the Po valley down to the Adriatic coast in the sixteenth century. However, in this, the eastern section of the valley, farmers made no investment in land reclamation and instead sowed rice only in marshy ground. They were attracted by the possibility of easy rewards from limited efforts. <sup>14</sup> For the history of the weeders who are central to this study, the events that took place in the province of Bologna from the Napoleonic period to the end of the nineteenth century were crucial. They will be examined in chapter 2, p. 58. Here I will focus instead on the rice belt—that is, the Vercellese, the Novarese, and Lomellina.

About 1760 the market price of rice caught up with the price of wheat and then surpassed that of all grains. It held this position until the end of the nineteenth century. 15 The rate of profit from rice growing became twice as high as that from other cereals and only in the Milanese did rice growing retreat by 1800 to give way to wet meadows (marcite). These were pasture lands where farmers using a complicated technique could grow winter grass and thus double the yearly pasture yield. 16 Then, the area east of the Ticino, the Milanese, lost first place in rice farming to an area west of the river, for its productivity was enhanced by the addition of new canals. Land on the west bank of the river offered greater possibilities for more concentrated,



The Italian rice belt. (From the collections of the Geography and Map Division, Library of Congress.)

intensive farming.<sup>17</sup> This land produced higher yields so that after 1830 rice growing was firmly established in this almost monocultural region between the Ticino and the Dora Baltea rivers. The family of Camillo Cavour, the politician who brought about the unification of Italy in 1861, owned a rice farm at Leri (Vercellese), which stretched over neighboring communes also. When Camillo's father bought it in 1822, it counted 900 hectares. Because of new land purchases it grew to 1,248 hectares in 1835, just when Camillo became its enthusiastic manager (*il Cavour agricoltore*). His biography describes his instrumental role linking farming with the chemical and food processing industries, and with commercial and banking activities.<sup>18</sup>

At the time of Italy's unification, seven centuries of patient planning and digging had given rise to the largest irrigation system in Europe, which by 1861 watered half a million hectares in the Po valley. A momentous event in the history of Italian agriculture took place in 1866: the Cavour canal opened. Laid upon solid foundations, it made almost a doubling of rice production possible. <sup>20</sup>

The canal had an enormous influence on Piedmontese and Lombard agriculture. An additional hundred thousand hectares in the heart of the rice belt benefited from artificial irrigation.<sup>21</sup> The irrigation complex grew to 1,493,330 kilometers with the digging of supplementary branches in successive years.<sup>22</sup> Thus the whole region underwent basic changes. The sediment brought in by the new streams connected to the network enhanced the fertility of the soil.<sup>23</sup> Swamps and occasionally flooded lands, which made up 30 percent of the rice grounds (21 percent located in the rice belt) in the early 1860s, were slowly abandoned<sup>24</sup> and then totally deserted toward the end of the century.<sup>25</sup> Meanwhile, trends evident before the unification of Italy were accelerated after 1866: higher rents, the concentration of property, and disappearance of peasants.26 The average size of a farm was eighty hectares; a 200-hectare farm was considered big. Sometimes two or three capitalist farmers, with holdings of over a thousand hectares, cultivated almost a whole township. 27 The tillable surface in the rice belt amounted to 99 percent of the land.

The codification of regular agricultural statistics for Italy started only in 1910. Earlier figures on rice growing are unreliable. The crop was subject to restrictions, the reasons for which will be discussed later. Farmers frequently disregarded the limiting measures and concealed the real extent of their yield; hence the recorded data must be interpreted as conservative. <sup>28</sup> Comparative figures for 1860 and 1870 show not only an increase of rice-growing areas (85 percent), but also an increase of output per hectare: from 17.2 quintals per hectare in

the years 1860–1864 to 20.7 quintals in the years 1870–1874 (1 quintal = 100 kilograms or 220.46 pounds). Novelli and Sampietro have presented the following figures for rice production in the whole kingdom:<sup>29</sup>

	W 12		Output per	
	Surface,	Production,	Hectare,	
Years	Hectares	Quintals	Quintals	
1860-65	145,000	2,600,000	17.9	
1870-74	232,000	4,810,900	20.7	
1879-83	201,850	3,584,900	18.1	
1890-94	182,450	3,046,400	16.7	
1901-05	175,365	4,434,500	25.3	
1910-14	144,998	4,878,700	33.8	
1915-19	138,618	5,218,300	37.6	
1920-24	121,400	4,698,800	39.5	

The planting reached a maximum surface area between 1870 and 1874. Then there was a contraction.

Asian rice brought to European markets through the Suez canal put an end to the primacy of the Italian crop. A rice production crisis, characterized initially by a fall in the prices of both rice and land,<sup>30</sup> coincided with the general decline of European agricultural prices between 1873 and 1896 when huge cargoes of grain also began to arrive from America. But the 1873–96 agricultural crisis was worldwide.

In Italy, as elsewhere in Europe, the depression provoked campaigns for inquiries into the plight of agriculture, and, with the exception of some countries, also a change in official policies from free trade to protectionism.<sup>31</sup> An increased customs duty on foreign grain was first levied in Italy in 1878. It was so low that at first it did not affect the price of grains or bread. It rose significantly in 1887, 1888, and then twice in 1894. Rice import duties were as follows:<sup>32</sup>

	Import Duties,
Year	Lire per Quintal
1887	3.0
1888	5.0
1894 (Feb.)	7.0
1894 (Dec.)	7.5

Prompted by falling market prices, many farmers<sup>33</sup> followed the rule of minimum effort and thereby neglected the necessary rotation and tillage of their land. This impoverished the soil and provided the conditions for the reappearance of a destructive rice disease, brusone.34 In 1884, the darkest year of the crisis, many farmers went bankrupt because of their failure to pay rent, which had skyrocketed during times of plenty.35 In the long run, this catastrophe served to put rice farming on a sounder economic footing; the experts spoke of a "surgical operation" that cut out almost all the marginal land in marshes.<sup>36</sup> This recession continued from the end of the crisis in 1897 until 1910. It resulted in the elimination of less productive patches.<sup>37</sup> There are figures other than those of total surface under cultivation such as the amount of rice harvested, yield per hectare, and market, land, and rent prices—that more accurately mirror the economic recovery. In 1897, when the signs of a general revival of the economy were already perceptible, all these indices also showed a favorable upswing.38

Rice growing came out of the crisis improved by the hiring of a larger work force and the use of modern farming techniques using machinery. In the Novarese the investment in farming technology was higher than in any other part of Europe. In addition, the government distributed to farmers new Japanese rice seeds free of charge.<sup>39</sup> When the crisis ended, a centuries-old process was completed: a variety of landholdings gave way to big and middle-sized farms rented out to capitalist farmers by generally absentee landowners. Underlying all these changes was the investment of more capital, especially in the big farms. Large loans were available on better terms for big farms than for smaller ones.<sup>40</sup> Rice figured prominently among Italian exports and the conversion from extensive to intensive rice growing had taken place.<sup>41</sup> Even *brusone* disappeared by 1895.<sup>42</sup>

## The Weeders

No other type of farming produced such a profound impact on the society of the Po valley. When it had taken hold in irrigated land, it introduced a new group of workers—wage earners.<sup>43</sup>

The employment of wage earners was not the only new thing about rice cultivation; there was also the presence of agents who recruited those who did the weeding (monda or mondatura).<sup>44</sup> The operation lasted about forty days beginning at the end of May, when the plants were two months old and numerous species of weeds

threatened their normal growth. When the Milanese was a dependency of the Spanish crown (1535-1714), rice farmers were already using agents to recruit labor. Middlemen mistreated the work force (whose sex was not specified) in such a way that Spanish magistrates promulgated an edict as early as September 24, 1594, aimed at introducing a labor contract to discourage the most blatant abuses against workers. The edict, "a start in social legislation," sought to eliminate the middlemen who were notorious for the "barbaric cruelties" they used against the workers once they were lured "to the assigned place with promises and blandishments." These agents treated them "brutally, without either paying them or providing these wretched creatures with the bare necessities of life, making them work like slaves, with beatings and with more verbal abuse than is used with galley convicts." They also caused deaths among their victims. The edict ordered agents to stop recruiting and ordered landholders or their lessees to guide laborers to and from their work personally "as is the case in the fields and in the vineyards," and to humanize their relations with the weeders. 45 That the Spanish authorities kept on propounding similar measures again and again in the sixteenth and seventeenth centuries hints at their failure.46

In any case, the edict was an early response to the exceptional social phenomenon created as rice farming spread. There was the formation of a small but powerful group of rice growers and a great mass of landless agricultural workers, and also the need to hire a large number of migrants from the region or from more distant places. When investments in rice farming increased in the eighteenth century, the old peasant institutions (sharecropping, perpetual land lease) that allowed families to live and work together at the farms slowly fell apart. The paternalistic relations that had bound peasants and landowners when they had invested less significant amounts of money in their land disappeared.<sup>47</sup>

Beginning in 1792, the French revolutionary wars accelerated social disruption. The owners of many middle-sized and small holdings were hit by high taxes, the ravages of war, famine, and the high cost of living. They lost their properties to speculators during the economic depression caused by the hostilities. When a temporary peace came in 1797, many independent peasants became landless victims of a "crisis of proletarization," and suffered from "physiological hunger"—in other words, starvation—as the price of grain rose while wages remained unchanged. In Piedmont, emphyteusis—a perpetual lease of land to a peasant upon condition of tilling it—decayed and was officially abolished in 1837. Similarly the

mezzadria or Italian sharecropping system, in use in Vercelli as early as 1107, withered away and almost disappeared at about the same time. <sup>51</sup>

In the 1830s, when more capitalist farmers stepped in as modern entrepreneurs, some fortunate sharecroppers (*mezzadri*) managed to rent land and come to be *affittuari*, but the majority of them lacked the capital necessary to grow rice. Once thrown off the land, they became mere wage earners, mostly rural. Only a few of them remained on a single farm all the year round with their families, with all members working for the same employer. The fact that they were called *schiavandari* (slaves) in Piedmontese suggests the true nature of their status, <sup>52</sup> which was very similar to that of the permanent rice workers in Lombardy. <sup>53</sup>

As a result of these profound changes in the land tenure system, many uprooted peasants became temporary wage earners in the rice farms. This prompted one French Encyclopedist, observing the concentration of such a large labor force paid with wages, to compare them to an immense manufactury.<sup>54</sup>

Economists and historians interested in these developments (Salvatore Pugliese, Giuseppe Prato, Luigi Bulferetti, Raimondo Luraghi, Luigi Faccini, Gabriella Facchinetti, Sergio Soave, Novello Novelli, and Giovanni Sampietro) do not estimate how many inhabitants of the rice belt became proletarianized in the process, nor do they specify the number of wage earners who worked in the rice fields. The weeders (mondariso, mondine, or mondatrici) were mostly women. 55 (Mondariso (sing. and pl.; fem.) and mondine (sing. mondina) are synonyms. The term mondariso is formal; it is used in official documents. Mondina is a popular term. Various sources refer to the size of this work force in vague terms, such as "thousands,"56 "a great many" (moltissime),57 or an "extraordinary quantity indeed" (quantită veramente straordinaria).58 The population of the three rice districts (Vercelli, Novara, and Lomellina) increased from 178,931 inhabitants in 1774 to 541,681 in 1881,59 but it is difficult to determine the total number active in agriculture. In the national census of 1881, in those three districts only, 73,608 persons over the age of fifteen declared themselves to be agricultural wage earners. Of these, 37,226 were women.60 Still, the real number of women working in agriculture was much higher, because the Italian censuses tended to list them under other categories, such as persons without profession, spinners, seamstresses, domestic servants,61 which were all occupations they undertook along with farming. Others may well appear as belonging to any of the other five categories of agricultural workers,

besides wage earners, that the census adopted: small landowners, sharecroppers, tenant farmers, stewards, and permanent workers.

What is unquestionable is that the total of 37,226 women wage earners in 1881 is close to the figure of 39,921 local *mondariso* recorded in 1903 when the first inquiry on labor in the rice fields took place.<sup>62</sup> This total increased in subsequent surveys,<sup>63</sup> mainly because the study of 1903 did not take the small farms into account. To the 39,921 local weeders, almost the same number of migrants must be added—36,224 or 46.57 percent—reaching a total of 76,145 weeders in 1903. One can speculate that each *mondatura*—excluding those of the crisis years—brought about a hundred thousand weeders to the rice belt from the inauguration of the Cavour canal until World War I. Eighty to 95 percent of the weeders were women;<sup>64</sup> the rest were men and children.

Several species of weeds grew in the rice fields with different degrees of stubbornness, depending on the circumstances, places, and times. If the rice field was "old" because the grower had sown the crop two or three times consecutively, undesirable plants would be reduced, but so would the amount of rice harvested.<sup>65</sup> Weeds would proliferate due to changes in the source of the irrigation water or to the kinds of seeds sown. In any event, the species of weeds tended to increase with the passage of time, sometimes spasmodically. Factors such as the opening of the Cavour canal, or the adoption of oriental seeds, while aiding rice farming, added to the unwelcome proliferation of new varieties of weeds.

In the nineteenth century, some farmers still relied on the cheap, though deficient, procedure of sliding a flat board over the growing rice plants to break the weed stems. These farmers saved money on wages by this method, but at the expense of a poor yield. A satisfactory method demanded a thorough monda by hand, and hence a huge capital outlay in wages. In Larizzate, Vercelli, the rate of expenditure on wages for the mondatura grew considerably in the course of 120 years. The figures for 1780, 1820, and 1900 indicate that, at the earliest date, only 1.3 percent (1.5 lira per hectare) of expenses went for the monda; at the second, 6.5 percent (8.25 lire); and at the last one, 28.2 percent (75 lire). In 1900 this percentage surpassed the cost of irrigation by almost one-third. It had previously been the most expensive operation: 50 percent of the total disbursement in 1780; 40 percent in 1820; and only 19 percent in 1900—but unchanged in absolute terms: 50 lire per hectare. Nevertheless, even an expensive weeding was a good investment. Profits doubled in these 120 years, as a result of the

increase in the price of rice, the decrease in irrigation costs, and the improvement in agricultural techniques, including weeding.<sup>66</sup>

We do not know precisely when the weeding work force came into being and when men and women of the rural proletariat of the Po valley ceased to work together in the fields. But this separation by sex was common by the seventeenth century, when masses of women were doing most of the weeding.<sup>67</sup> There is a description of the whole female population and some children living in the vicinity of the fields congregating for the *mondatura* in the eighteenth century.<sup>68</sup> By the third decade of the nineteenth century most commercial rice growers had adopted weeding by hand.<sup>69</sup>

I may suggest reasons for the formation of a work force of women weeders and for the sexual division of labor. All ablebodied members of the workers' families in the rice-growing region had to earn their own subsistence. Budgets of workers' households during the eighteenth, nineteenth, and early twentieth centuries show that what the head of the family earned as a temporary or permanent farm worker served to pay for only his own food, garments, tools, and some basic common expenses, such as the house rent, lamp oil, firewood, and the purchase of home utensils and furniture. Pugliese points out that in order for the man of the house to meet these expenses, he had to be in good health, in his prime, and fully employed.<sup>70</sup> Given such a precarious household economy, employers expected the women and children from these families to sell their labor as well, and this is what actually happened.71 A division of labor was established between the sexes, and as a result weeding became women's work. Male permanent farm workers performed other jobs at monda time.

Researchers on occupational sex segregation recognize this as universal, but underline the complexity of distinguishing the different tasks by gender. Cynthia Lloyd summarized anthropological findings in different farming systems: "Each society has a clear sexual division of labor . . . however . . . there is no common pattern of sex roles across society." In other words, each community has a different way of dividing the burden of work among the sexes, which its members will find quite "natural."<sup>72</sup>

Heidi Hartmann, while alluding to the disagreements among the different schools of anthropological thought on the division of labor, points to the control that men have traditionally exercised over the labor of women and children in the family. Moreover, she pays special attention to the anthropological school that studies changes in the social, political, and economic structure of different societies and their impact on the condition of women, including those stemming from the more recent emergence of the capitalist mode of production and the wage system. The results of these changes are the increasing complexity of these societies, their social stratification, and the decrease of the status and influence of women. She asserts that "in our society the sexual division of labor is hierarchical," enforcing the already existing domination of men over women. Women stay at home as unpaid family workers, or work outside the home in occupations labeled "unskilled" female jobs.<sup>73</sup>

More recent attempts at explaining the sexual division of labor reflect conflicting views. Some studies conclude that women's reproductive functions are the main determinants of their subordination in the family and then also in the labor market. Others tend to place greater emphasis on the role played by the capitalist mode of production and on women's productive activities in the establishment of a gender-ordered division of labor.<sup>74</sup>

Although sometimes working conditions seem to disclaim the existence of any labor segregation by sex, at close scrutiny the instances show a sort of sex-ordered division. Patricia Hilden, for example, found out that between 1880 and 1914 women textile workers in French Flanders performed most of the time the same factory tasks as men, together with them in the same workrooms. However, a hierarchical organization was clear when it came to wages: women earned only from one-half to two-thirds as much as men. Jane Lewis observed the same situation among weavers of both sexes in pre–World War II England.

The division by sex can also be merely formal, the arbitrary recognition of men's ability to perform certain operations that they monopolize in the work place, and a mental satisfaction or "gender pride" that does not substantiate better wages for the male work force.<sup>75</sup>

In the case of the Italian weeders, we may raise the question as to whether sex segregation simply perpetuated a tradition as old as the weeding itself or whether women became weeders because they were the only workers available at *monda* time, or whether male workers played a part in assigning the *monda* to women, or whether there actually was a certain inborn ability of women for the task, or whether employers elaborated such an argument to justify a sex segregation based on a mere economic consideration, such as profit. I will have to consider all these arguments to reach a satisfactory explanation.

The assumption that it was natural for women, constrained by their domestic duties, to look for jobs close to home such as the rice fields often within walking distance, merits scant consideration. Almost half the weeders, single or married, were migrants who staved for forty days and sometimes more than a hundred miles away from their homes. Nor can it be argued that the occupation reflected homebased values that made it desirable to women because weeding bore no clear parallel to domestic labor. The idea that men were busy with other activities during the monda season applies only to years of full employment, but not to the frequent cases where men were out of work, even though they might have had recourse to temporary migration to urban centers or abroad. Furthermore, rice farmers, when in need of more mondariso, recruited migratory women. It is improbable that men workers, powerless and subordinated as they were in the social scale, might have had any influence in allotting the monda to women, at least in the period when this work force was formed.

Along with many other direct observers, rice growers had their own reasons to explain why women and children became weeders. One important factor was probably the cheaper wages women and children could be paid, but employers never said so outright. Instead, they presented what they considered to be rational statements, which were sometimes combined with more pragmatic arguments that leave the value of their rational convictions open to doubt. Some argued that only women displayed the patience needed for weeding, or that the bodies of women (and children) were appropriate for weeding because they were smaller and lighter than men's. They could move with more ease in the rice fields and, thus, cause less damage to the tender plants.<sup>76</sup> Even in 1903, Francesco Pezza, the public health officer of Mortara, upheld the notion that women and children had very flexible backbones and were therefore well adapted for this task.<sup>77</sup>

Antonio Aldini, an important rice farmer and statesman in Bologna during the Napoleonic era, gave two types of explanations in 1815. He said that "neither the experienced men nor the robust male youth" were employed in the weeding because "they were reserved for work requiring greater exertion," and also that "only women and children of eight to ten years are employed in this job, in which dexterity more than force is required." Novelli and Sampietro, writing in 1925 the history of rice farming, also gave two sets of reasons. First, weeding, although tiresome, was suited to the physical capacity not only of women and children, but also of "those [men] who are already turning old"; in other words, "weak" persons. Second, that it was impossible to do without the female labor force at *monda* time

because a large concentration of workers was required in a brief period when other seasonal work, like the grain harvest, preoccupied the male work force.<sup>79</sup>

These rational explanations thus point to the innate physiological and mental characteristics of women—agility and endurance—that they curiously enough shared with children and middle-aged men. These characteristics "naturally" predisposed them for the mondatura. Among other things, practical arguments stress that women's light bodies inflicted less harm on the plants and that men were needed for jobs that required more physical strength. But weeding was an exhausting job. It was done at the time when fields were flooded and the women, their bodies bent over, had to spend the whole day standing in water up to their knees. This had grave consequences to their health. Besides, throughout the year weeders performed many other jobs requiring different degrees of physical exertion and qualities other than patience and endurance.

Therefore, there were no compelling physical or mental factors to warrant defining weeding as a woman's job. No inherent quality seems to determine their predisposition for weeding. Instead the observers, mainly employers, imposed certain physical and mental traits on weeders, which were determined allegedly by their biological sex, but they were only their own social creation. We may use the concept of gender here in reference to the socially constructed representation of women and men, based on biological determinism, which assigned appropriate roles for both women and men, and prescribed relations between the sexes.<sup>80</sup>

We must ask ourselves, then, whether the socially constructed gender traits that placed weeders in this specific task were not "a tool of profit maximation"<sup>81</sup> on the part of farmers, who used gender issues to assert economic interests. Weeding was the field operation that required the largest labor force, cost the most in wages, and was the one in which the employer would try to exert the greatest pressure. Harvesting and threshing were second and third. Hiring women for weeding was to the farmers' advantage in several ways. Special wages, lower than men's, corresponded to a special unskilled women's job. There was a reduction or, sometimes, a slower rate of increase of men's wages in a labor market expanded by the presence of women. <sup>82</sup> Finally, lower men's earnings forced the vast labor reserve of women out of the home and into the work place, as happened in the mid-1860s. This was perhaps a deliberate employers' maneuver to expand production while keeping wages down.

In his study on rice farming in Vercelli, Pugliese follows the

fluctuations of wages showing that a deterioration of men's wages can be partially attributed to women's employment. Besides being lower than men's, women's wages rose at a slower rate since 1700when women were paid half of men's wages. Women's wages, however, made substantial progress in the years 1866-70 and after. The opening of the Cavour canal, the extension of rice growing, and the need to attract more weeders may well explain this upturn. In contrast, the rate of increase of men's wages, especially for harvesting, which had been very brisk since 1830, became slower than the rise of women's wages between 1866 and 1870 and between 1871 and 1875. Thereafter, men's wages actually contracted until the end of the economic crisis, while women's continued to climb until 1881-85, when they then plunged relatively faster than men's, but for a shorter period (1886-95). When the economy recovered, by 1896, women's wages also improved at a quicker rate than men's. "There is no reason to wonder at this," Pugliese concludes, "because it is well known how the rising demand for arms generally causes increase of the lowest wages, as those of women, who just then find jobs, while, if the demand slackens, they are the first to remain idle."83 Therefore, the reduction of men's wages was caused by the increasing use of women's labor. We have to keep in mind that rice farms also included tracts of grain and pasture land, and that employers drew on the same local labor pool of men and women for various agricultural tasks.

The general assumption that women had fewer needs than men may have justified wage differences in the eyes of employers and of economists as well, who were far from considering that "fewer needs" might also mean eating less and worse, and therefore having poorer health than men. Pugliese's charts of workers' family incomes and expenditures show that only men's wages could cover key expenses, such as rent, and this calculation presupposes the dependence of women on men for their survival. There are no estimates based on circumstances when the head of the family or his income were lacking.

The relative value of weeding wages shows the progress of women's compensation—or the comparative stagnation of men's wages. In 1866–70 weeding wages were slightly less than two-thirds of those paid for the so-called special men's work, such as haying, reaping stubble, grain harvesting and threshing. Weeding was also "special" work, and thus paid more than the ordinary chores like haying and hoeing. Special chores were either harder, or took place at a time of great demand, or needed a longer workday, like rice and millet weeding, harvesting, and threshing, and turnip and hemp

harvesting. 84 Rice weeding stood out because it employed the largest work force. By the turn of the century *mondariso* wages were more than two-thirds that of men's. The gap tended to narrow in the first years of the twentieth century, especially if we take into account the shortening of the woman's workday. 85 This last fact opened new opportunities for the weeders to do other things. Pugliese evaluates the new situation:

Moreover, the woman, being less carried away by wasteful entertainments, in which the male sex more easily indulges, succeeds in employing with pecuniary advantage the many free hours left at her disposal from the shortened schedule, either gathering wood, greens, and gleaning in the fields, tilling a rented tract of orchard, catching frogs, breeding poultry, and the like.<sup>86</sup>

Be that as it may, it is difficult to assess the value of the weeders' wages, especially if we try to go beyond the unanimous understanding that they were very low. They were "a bit higher than those paid in the Far East," wrote the physician Gianverardo Zeviani, moved by the misery of the *mondariso* at the end of the eighteenth century.<sup>87</sup> Or they served only to pay for quinine to cure the malarial fevers contracted during weeding, if we follow another physician, Francesco Puccinotti, writing in 1843 about the health hazards posed by rice farming.<sup>88</sup>

Weeding wages changed from week to week. In 1878 they were low at the beginning of the season (about 1 lira a day) in a farm of Novara, increased in the following weeks (2 lire a day toward the end), and decreased to the initial level at the very end. 89 Local variations were the rule. A table of weeding wages for the period 1880–1910 shows the following figures: 90

1880	1.65 lira
1903	1.79 lira
1905	1.95 lira
1910	3.00 lire

These statistics are of little help if we want to learn about the wage fluctuations during the depression that started in the 1880s and continued until the end of the century. Also, one has to keep in mind that after 1904 workers struggled primarily for the shortening of the work-

day and for full local employment. They considered wage increases a matter of secondary importance.

The problem is to try to evaluate the household needs that weeders intended to meet with their wages. These needs were always family needs and they changed according to whether the weeders were part of the household as daughters, wives, or mothers. One also had to consider in what kind of household the weeders lived, because this would determine how women coped with the problem of permanent scarcity.

Single *mondariso* were ruled by their parents. <sup>91</sup> As young children they were taken to weed (children numbered 4,904, or 6.44 percent of the labor force in 1903), probably because the number of household members exceeded the resources available to feed them. Other reasons were the lack of any type of child care while the mother was weeding, and the interest of employers in hiring mothers with children in order to increase the number of low-paid elements—elements considered "inferior," according to the inquiry of 1903—in work squads. Children were paid half the wages of adults. <sup>92</sup>

Daughters' obligations to contribute to the family economy often required them to move out of their homes to work as domestic servants. With their departure, they relieved their families of the burden of providing for their care while from then on they had to bear the combined burdens of supporting themselves, helping support their families, and accumulating their dowry. What about the dowry? The 1903 inquiry on weeding presents the case of a young woman servant who was allowed by her master to take leave to go to weed and save her wages for her dowry, and this had been stipulated at the time she entered service. 93 Surely hers was not an exceptional case.

These were possibly cases of single women who were part of households of wage earners whose family economy was basically a "family wage economy," hat is to say, a family economy based on wages earned by its members. If the household was even partially a unit of production and not simply consumption, daughters assisted in this production. The life of Nanna, the protagonist of a novel entitled *In risaia* [In the rice fields], written in 1878, may have aspects in common with many other women's lives of the time and place under consideration.

In this novel the head of the family was a humble tenant in Novara, on whose farm no rice was grown. Nanna, his daughter, was a geeseherder until she was ten. Thereafter, she and Maddalena, her mother, took care of the kitchen garden and prepared baskets of vegetables that Maddalena sold in local markets. This family arrangement suffered a crisis when Nanna turned seventeen, for at that age young women began preparing for marriage. Marriage meant a dowry, and the accumulation of a dowry undoubtedly meant an economic burden to the family. Nanna's father could contribute only a small amount to it.

One mainstay of a woman's dowry in the region was a mattress. Nanna's was filled with the softest goose feathers, which Maddalena had saved carefully since her daughter's birth. The other was a set of silver hairpins, which indicated that a woman had reached the age of marriage. No man would propose to Nanna unless she wore them. The hairpins cost 72 lire, but Nanna's father, crushed by low prices and high rent, had only 30 lire. So, to resolve this matter, all the family members, including Pietro, Nanna's 15-year-old brother, met and decided that Nanna should work in the rice fields. In this way, she could earn enough to pay for her own dowry. Nanna and Pietro, who volunteered to cooperate in the endeavor, went to work hoeing rice fields prior to the weeding. This was an ordinary, lower-paid operation that took place between April and May. At 75 centesimi a day, they would earn 22.5 lire each. Finally, after buying her hairpins and recovering from the malaria she contracted while hoeing, her friends convinced her to go out to weed with them, hoping to amass 50 lire more for her trousseau95 and, why not, be able to see a young carter to whom she felt attracted. Very quickly she learned from her comrades to earn a little extra money by letting water leeches bite her legs. To cast the worms away was tantamount to "kicking fortune out,"96 because, once stuck to the skin, they could be caught and sold in the town pharmacy on Sundays for 20 centesimi apiece. After removing the leeches, the bleeding could be stopped by applying cobwebs found on dry ground, the same ground that served as a bed at night.

Other single women, if they lived in or near an important urban center, alternated weeding with work in factories. We may look at other women's lives. R.B., for example, born in Cappuccini, Vercelli, in 1902, dropped out of school at the beginning of the second grade. She never attended a whole school year because, being the oldest of eight children, she had to remain at home taking care of her younger brothers and sisters in the spring while her mother worked in the fields. At nine, her aunt took her out to weed, but thereafter the farmer did not hire her, in order to avoid penalties, which were instituted after 1907, for employing children under the age of fourteen. At that age, she began to alternate work in the rice fields in the spring

and summer with work in the button factory in Vercelli. She preferred the ten-hour long night shift at the factory with its higher wages, although it was below what she earned as a *mondariso*.<sup>97</sup>

M.B., also from Cappuccini, was born in 1895. She was the fourth of eight children, and only finished the second grade, for she too had to watch over her younger siblings. She went to the market to sell silk yarn that she helped produce at her grandmother's house, reaped hemp and jute, and then put the bundles to steep in the Sesia River for several days, and carried them home to take the plants apart and gather the yarn. At twelve, she went to weed with her mother. Each time she wanted to straighten her aching back, her mother pinched her legs to keep her from being dismissed. She also worked in a brick kiln as her father's helper and in the button factory.

After marriage, women who had to quit one of their jobs stopped factory work, where their wages were lower than *monda* wages. <sup>98</sup> Wives and mothers also made a variety of contributions to the household economy. Maddalena, Nanna's mother, had weeded while she was single and continued to do so after her marriage and the birth of her children. Later on, she turned to productive activities on the farm—helped by her daughter when she became ten years old—and to selling produce at the local market.

The wives of the few permanent farm workers in the rice farms had to participate in different tasks, including the weeding, which was their best paid job in any year. By the mid-nineteenth century wives in this type of household earned "half of the bread necessary for the family" in a year. <sup>99</sup> In 1880 their earnings were calculated at 80 lire a year, if they managed to work for two hundred days, which was not always possible. This was more than one-fourth of the 360 lire earned by their husbands. We must keep in mind that growers took advantage of the women of the households of permanent workers. Because they were living on the farm, they were paid at a lower rate than women hired as temporary workers. The rights of gleaning and of being hired before the latter supposedly compensated permanent women workers for their lower wages. <sup>100</sup>

Additionally, the weeding wages of wives in households outside the farms contributed to the family economy. In some cases their households were structured within the family wage economy, with the head of the family working as the wage earner, as many rural day workers (braccianti) did. Other family heads gained a degree of independence, like poor fishermen, whose wives sold fish and frogs in the market before they went to weed.

The contribution of these women was sometimes defined as the

payment of the yearly house rent. <sup>101</sup> In the early twentieth century, "after the big strikes," as one weeder explained, some could purchase a stove, which made their lives more comfortable and put an end to the old tradition of spending winter evenings in the stable. <sup>102</sup> The social aspects of gathering in the stables were not immediately obliterated by the change, because families with stoves used to invite their less fortunate neighbors to spend the evenings in their kitchens. By this time weeders' families began to buy wheat bread to replace homemade corn bread. <sup>103</sup> Some single women saved *monda* wages to buy flowered aprons and colored head kerchiefs, two luxury garments they wore to dances. <sup>104</sup> In general, women purchased "expensive and short-lasting dresses," men ate and drank more, but their housing remained as miserable as ever. <sup>105</sup> Silver hairpins apparently fell into disuse before the end of the nineteenth century. Thereafter, a wardrobe and a chest of drawers became the bride's typical dowry. <sup>106</sup>

While nursing their own offspring, weeders could often act as wet nurses for urban infants as well. In fact, many mothers weaned their babies early in order to work as wet nurses or in the rice fields. 107 Weeders breast-fed foundlings entrusted to them by charitable institutions or children of well-to-do families. In the city of Vercelli the percentage of "exposed" children in the foundling hospital (ospizio) went down from 9.26 percent in 1871 to 6.13 percent in 1911. Among "exposed" infants there were not only illegitimate but also legitimate children whom their families could not support. The proportion of illegitimate to legitimate children in the ospizio is unknown. Around one-tenth of these foundlings stayed in the institution; the rest were sent out to the families of wet nurses, paid by the ospizi, in the city or in the countryside. From 1880 to 1905 both groups amounted to about five hundred foundlings. 108

In the fall and winter, many women were busy spinning linen and hemp in the stables. They also caught frogs and fish in the stagnant waters of the rice fields during the night. These were either to be eaten fresh or to be preserved with salt. <sup>109</sup> We also know that agents, with false promises, lured young women from Mede (Lomellina), and other localities of north and central Italy, to work at the Tobler chocolate works in Bern in the twentieth century. The contracts guaranteed good wages and living quarters, terms the employers never fulfilled once the women arrived in Switzerland. The factory system of wage deductions prevented Italian workers from saving the money that would have allowed them to flee the factory and pay for the trip back home. <sup>110</sup> Very rarely were women not engaged in some productive activity. M.B., a *mondariso* of Vercelli born in 1895, tells that her moth-