

The Background to Burns—

Farming in 18th-Century Ayrshire.

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Ayrshire at the time of Burns, two centuries ago, was a different sort of place from what it is now, in many ways. To begin with, the whole landscape was different. Let us look at the Ayrshire countryside as it is now—the rectangular fields, the tidy hawthorn hedges, the plantations of trees, the neat whitewashed farmhouses, the well made country roads. All these are man-made, created since the time of Burns. The very fields are different. Generations of liming and manuring and draining have transformed them. The fields of Ayrshire are greener than they were in Burns' time. Ayrshire is a bonnier place than it used to be.

Some things have not changed—the skies so often obscured with the clouds that presage the sudden shower; the coast with its sandy bays and rocky outcrops; the hills in the background; the deep covering of brown boulder clay that clothes the bedrock, puckered and wreathed up into undulations throughout the lowlands; furrowed by the burns and waters that drain westwards into the Firth of Clyde.

But the surface of the land has been transformed. In the 18th century it was a bleak land, as it had been for long generations before, and the contemporaries of Burns make repeated reference to the great changes they saw under way, fashioning the ancient "state of nature" into the green and fruitful countryside of the present day.

The ministers and others who contributed to the Statistical Account towards the end of the 18th century noted the changes. In Tarbolton the "ancient and natural aspect has evidently been sufficiently rude and wild, bare and unsheltered; varied with frequent inequalities of surface, marshy in the hollows, on the heights overgrown with heath. But the rude aspect of nature has here, long since, given place to the beauties and the wealth of industrious cultivation." In Symington: "About fifty years ago, this parish, like others in the neighbourhood, was almost in a state of nature. At that period there were no inclosures, except the glebe or a few acres adjoining, which about seventy years ago, were inclosed with hedge rows. The country in winter was naked waste, scarce a tree appearing to gratify the wandering eye, except a few about the seats of resident heritors; and the roads were all deep and unformed." In the same area,

at Stair, "The general appearance of the parish, as well as the productiveness of the soil, has been greatly improved since the year 1735, when the present incumbent was settled. At that period there was no fence of any kind, excepting one small inclosure of fir near Barskimming and some coppices of natural wood. In summer, the cattle were herded between the different corn fields; and, in winter, they ranged at large over the whole country; at present every farm is inclosed and subdivided; and so completely have the notions of the commonalty changed in this respect, that scarcely any person will agree to take a farm, or pay an adequate rent, unless the lands are properly inclosed; although formerly their prejudices against inclosures were so vehement, that dykes and gateways were frequently broken down as soon as erected. This the present incumbent had frequently the unhappiness to experience when he first began to inclose his property in this parish and in that of Coylton."

It was the same in north as in central Ayrshire. Around Kilmarnock, "till about 35 or 40 years ago . . . no inclosure was to be seen, except, perhaps, one or two about a gentleman's seat, in all the wide, extended and beautiful plain of Cunninghame. Hence, at the end of the harvest, when the crop was carried from the field into the barn-yard, the whole country had the appearance of a wild and dreary common, and nothing was to be seen, but here and there a poor, bare and homely hut, where the farmer and his family were lodged. But now the scene is completely altered and infinitely to the better. There is, at this time, scarcely a single farm, in all that wide-extended plain, that is not inclosed with ditch and hedge, and most of them with numbers of intermediate ones, to separate the fields from one another. . . . This, along with other improvements made upon the soil, has rendered the grounds much more productive and fruitful than ever they were in any former period, probably three or four times at least." Near Ardrossan, "Forty, even thirty years ago, the land was almost in a state of nature, very low rented, and the parish almost destitute of inclosures. . . . Its present state, however, compared with that in the remembrance of some old men, shows that the farmers have not been altogether idle or ignorant."

Only in the remoter areas, in south Ayrshire particularly, were improvements absent. "As to improvements of any sort, it may be said to be in its natural state," it was written of Barr.

Another writer later summed it up: "The face of the country was far from being cultivated or inviting. On the contrary, it appeared rough and dark, consisting greatly of heath, moss, patches of straggling wood and roughly cultivated grounds. The roads,

made entirely by statute labour, were not smooth, irregular in their line, and far from being level in their track. The ditches which bounded them were seldom cleared out, and the hedges with which they were skirted being allowed to shoot forth into all their wild luxuriance were seldom cut and almost never pruned or clipped. Young trees were rarely planted, except perhaps in the hedge-row, in short the work of rural improvement had not yet begun, the country presented upon the whole a bleak and somewhat repulsive appearance."

Until the 18th century, then, and for centuries before, Ayrshire was a bleak land, with mosses and muirs covering not only the uplands but much of the lowlands as well. Areas now improved were barren; and many of the farm names, like Mossiel, commemorate their former state. There were lochs and marshes, many of them shown on early maps, which have silted up or been drained in comparatively recent times. Lochlea had actually a loch when the Burns family tenanted it; it was drained in the 19th century, exposing incidentally the remains of a prehistoric lake-dwelling. And though the countryside before the 18th century was not entirely devoid of trees, as is sometimes stated, nearly all the present-day woodland had still to be planted. The roads were mere tracks, unfit for wheeled traffic. When William Burnes's coffin was taken from Lochlea to its last resting-place in Alloway Kirkyard, it was carried on poles, between two ponies.

When one considers the "state of nature" of the old Ayrshire countryside and compares it with what there is now, one realises how un-natural and man-made is our modern landscape. "God made the country; man made the town" is a half-truth. The townsman for whom the countryside is simply a place to come and stare at scenery forgets that man has made the country what it is every bit as other men have made the towns. Even the countryman seldom appreciates how artificial is his environment.

Until the 18th century the people of Ayrshire lived on the land, sometimes precariously, almost like settlers only capable of partially colonising occasional patches of virgin territory. Then in the space of a few generations by concerted efforts the land was subdued and throughout the lowlands at any rate nature was modified to human ends. The new interest that the 18th century was showing in Nature was kindled, or at least quickened, by the new landscape that was being created by the pioneering farmers.

The transformation of the landscape in Burnes's lifetime reflects a fundamental alteration in the farming system that was being effected. In the 20th century the typical Ayrshire farm is a

holding of 150 acres or thereabouts, maintaining a herd of dairy cattle; most of the land in pasture, the remaining fields ploughed up in a long rotation to grow oats, hay and root crops to feed these cattle. The principal products are liquid milk, sold through the Scottish Milk Marketing Board; probably eggs; and perhaps a pedigree calf or two sold at Ayr or Kilmarnock markets. Go back two hundred years and you will find this economy in its earliest infancy. One 18th-century Ayrshire observer noted "the total and happy revolution" in farming that had taken place in his lifetime, and many make reference to what was described as the "antient state" of earlier days and to "the barbarous mismanagement from which the county has emerged."

The old system of farming was one which had survived with few changes in its fundamental character for long centuries, ever since the Scottish lowlands were first settled. It might be described as a variant of the open-field system as found in England, where, as is now recognised, there was a wide difference in types from place to place.

The unit of farming was what, in other parts of Scotland at any rate, has been referred to as the "ferm-toun." The ferm-toun was a cluster of several cottages, each the home of a family, and the several families combined, or had originally combined, in the co-operative cultivation of the adjacent land, primarily to provide for their own subsistence. Beside each cottage was a small patch of ground enclosed by a ditch or fence or usually a dry-stane dyke—the kailyard or vegetable garden. Nearby was the large infield or croft, open and unenclosed, cultivated by the several farmers, ploughed yearly, receiving all the dung from the midden, and cropped year in year out, with seldom any intermission. The land was originally held in runrig by the several farmers, each having several of the rigs or strips into which the field was divided. Further away patches of ground were opened up from time to time, making one or more outfields, ploughed and sown with oats, barley, some peas and beans, manured only with the droppings of cattle which might be folded there after the harvest; and the field was abandoned when the soil seemed exhausted. Apart perhaps from a meadow producing some hay, the rest of the land was rough pasture for the lean black cattle, the sheep and the fowls, which wandered about in the care of herds; or in the case of the cattle sometimes tethered or contained by a temporary fencing. Between the ferm-touns were wide tracts of barren, uncultivated land.

Each ferm-toun supplied the bulk of the needs of its farming folk—oatmeal, milk products and kail formed the basis of the diet; wool and leather provided materials for clothing; local

stone, lime, timber, turf and heather gave them their building materials; and peat from the muirs was their fuel. Some surplus for marketing did exist and some specialisation, as is referred to in the ancient rhyme :—

“ Kyle for a man, Carrick for a coo,
Cuninghame for butter and cheese,
And Galloway for 'oo'.”

But the people were dependent for their subsistence on their own produce and suffered severely when their crops failed. Colonel Fullarton, whose report on Ayrshire farming at the end of the 18th-century contains a good deal of information about the older times confirms this. “The people having hardly any substitute for oatmeal were entirely at the mercy of the season. If the seedtime were unfavourable, the summer bad, or the autumn late or stormy, a dearth or famine unavoidably ensued. The price of meal fluctuated, therefore, between extremes, which are never known in countries better cultivated; or where the means of subsistence are so varied, as to render the failure of one species suppliable by some other. At the beginning of this century, and the end of the last, there was a succession of bad seasons which lasted several years, and reduced the county of Ayr and other provinces adjacent to the lowest gradation of want; obliging hundreds of families to fly for subsistence to the north of Ireland, where their descendants still remain. . . . In those seasons of misery, the poor people have not infrequently been obliged to subsist by bleeding their cattle, and mixing the blood so procured, with what oatmeal they could procure.”

From Fullarton's report we can reconstruct a more detailed picture of the old system of farming as it existed in Ayrshire at the beginning of the 18th century. “The arable farms were generally small, because the tenants had not stock for larger occupations. A ploughgate of land, or as much as could employ four horses, allowing half of it to be ploughed, was a common-sized farm. It was often runridge or mixed property, and two or three farmers usually lived in the same place, and had their different distributions of the farm, in various proportions, from 10 to 40, 60, or 100 acres. Most of these leases were granted for three 19 years. The rent was frequently paid in kind, or in what was called half labour, by the steelbow tenants, like the Metayers of France; the stock and implements being furnished mutually, or on such terms as could be fixed. One-half of the crop went to the landlord; and the other remained with the tenant, to maintain his family and to cultivate his farm. The tenants were harassed with a multitude of vexatious servitudes; such as ploughing and leading for the

landlord, working his hay, and other operations; which, from the nature of them, unavoidably interfered with the attention necessary on the tenant's own farm. These are now almost entirely abolished.

“The farm was divided into what was called the croft, or in-field, and the out-field land. The croft, which commonly was a chosen spot near the house, after two or three crops of oats, received all the dung produced from the farm; and then was sowed with bigg or four-rowed barley. It then remained a year in lay; and was broken up the following season to undergo the same rotation. As to the out-field land, it remained in a state of absolute reprobation. No dung was ever spread on any part of it. . . . The land over-run with weeds and rushes, gathered into very high, broad, serpentine ridges, interrupted with large baulks, such as still disgrace the agriculture of some English counties. The little soil there was, collected on the top of the ridge, and the furrow drowned with water. No fallows, no green crops, no sown grass, no carts or waggons, no straw yards; hardly a potato, or any other esculent root, and, indeed, no garden vegetables; unless a few Scotch kail, which, with milk and oatmeal, formed the diet of the people; with little straw, and no hay, except a scanty portion of the coarsest quality collected from the bogs. The quantity of dung produced was of small avail; and that portion, little as it was, the farmers dragged on cars or sledges, or on what were called tumbler-wheels, which turned with the axletree, and supported the wretched vehicle, hardly able to draw 5 cwt. The ground was scourged with a succession of oats after oats, so long as they would pay for seed and labour, and afford a small surplus for the family; and then remained in a state of absolute sterility, or over-run with thistles, till rest enabled it again to reproduce a scanty crop.

“As the winter seasons, in Ayrshire, are extremely wet, the plough was never yoked till Candlemas. It does not appear that the farmers were in the practice of using more than four horses to each plough; but, there was a man to hold, another to drive, and a third to clear the mould board, and keep the coulter in the ground. The plough was of the Scotch kind; and as the land was generally stiff and full of stones, and never properly cultivated, it was thought necessary to construct it of the strongest and most clumsy materials. The cold and rainy springs suggested the practice of sowing extremely late, so that oats were seldom harrowed in before April; and it was not infrequently the end of May before the bigg or four-rowed barley was put in the ground. . . .

“Every farmer sowed a sufficiency of flax to employ the women of his family at leisure hours. A small portion of hemp was likewise planted to make sacks and other coarse materials

needed on the farm. And a quantity of wool was either bought or reared for the purpose of spinning woollen stuffs to cloathe the family. These, as well as the linen, were usually worked by some weaver in the neighbourhood, and supplied the dress of both sexes. The stalks of hemp were substituted in the place of candles; and even in situations adjoining to a coallery, whole months were wasted in cutting, drying and leading peat, to serve as fuel. . . .

"The starved cattle kept on the farm were suffered to poach the fields, from the end of harvest, till the ensuing seedtime; and thus the roots of natural grass were cut on all the clay lands or drowned with water standing in the cattle's footsteps. The horses, during winter, were fed on straw, on boiled chaff or weak corn, and on such hay as the bogs and marshes spontaneously produced. . . . As there were few or no inclosures, the horses and cattle were either tethered, during the summer months, or trusted to the direction of a herd and cur-dog, by whom the poor starved animals were kept in constant agitation; being impelled, through famine, to fly from their bare lays, and commit continual depredations on the adjacent crops. . . . The cattle, starved during winter, hardly able to rise without aid in spring, and perpetually harassed during summer, never were in fit condition for the market. But undoubtedly they must have been of an admirable race and stamina, otherwise they never could have survived the treatment they experienced.

"Wretched as the system of management was, it is obvious that the light, rich lands would by no means suffer in the same proportion with the hard and tilly soils. On the contrary, they produced considerable quantities of grass, and kept the cattle, fed on them, in good condition. With respect to the moorland part of the county; as its bleak and elevated situation, with the cold, wet nature of the soil, render it by no means favourable to the growth of corn, under any mode of management, it necessarily, in those days, retained a relative barbarism with the lower districts."

By the 18th century various changes in management had been accomplished within the structure of the ancient system, some of which can be read between the lines of Fullarton. The runrig system, by which each tenant had intermixed holdings throughout the fields, was being superseded by consolidated holdings. A 19th-century writer, thinking back to his young days in North Ayrshire around the 1760's notes that "As far as I can recollect, though farm houses were sometimes clustered together, yet each one of the group had its little portion of lands set aside for separate cultivation, and there were in this quarter no conjunct tenants, like hamlets in other parts held and farmed in common."

Yet ploughing, and perhaps harvesting, probably still involved collaboration between farmers, just as threshing continues to require in some places.

Then various rotations were being worked out, as is indicated by this report from Kilwinning parish. "By way of contrast to the present improved state of the parish, it may not be improper to insert the rent, mode of cultivation, prices of provisions, &c., &c., that took place about fifty years ago. In the year 1742 the average rent of an acre was 3/-. The parish was then wholly uninclosed, excepting an inclosure or two about Eglintoune Castle. The farmers plowed with four, and sometimes with six horses, and three men. The business of the third man, it was pretended, would keep the plough steady, and prevent its starting aside, or going out of the straight line. The ridges were excessively broad, and raised very high in the middle. Nearly two-thirds of every ridge were left, in a great measure, without any of the soil, and even the very little that remained being, during the winter, almost covered with water, was soured, and consequently in a state that produced very little, either of grass or grain. Every farm was considered as divided into outfield and infield, or, as this last was called, the croft. The infield, or the croft, was in proportion to the size of the farm, from 6 to 16 acres. It was kept constantly in tillage. The course of crops were—1st, bear; 2nd, pease and beans; 3rd, oats; then dunged for bear. The outfield was never manured. It was divided into two parts, croft with oats two years, and pastured two. This was the general practice. There were some who croft it two years and pastured three. Produce from 1½ to 2 county bolls. This produce did little more (if so much) than to defray the expense of feed and labour. There was no sown grass; consequently no hay, except in some few farms, a little meadow hay. From this slovenly and absurd mode of management the pasture was extremely scanty and of a very poor quality. Though the soil was wet and entirely without any shelter, every farm kept a certain number of sheep. The number varied according to the extent of the farm. They were constantly housed at night. The wool they produced was coarse and in very small quantities. There were very few milk cows. From their ignorance of a dairy, the profits the farmers made of the few cows they kept, were extremely inconsiderable. Skimmed cheese was the only kind they knew how to make. The little sweet milk cheese which was then used, was imported from Ireland. Lime was very little known and still less used as a manure. There were no potatoes planted, except perhaps a very few in a garden or in the corner of a field."

The various innovations in husbandry before the 18th century were piecemeal, limited in scope, and in many respects superficial; the fundamental character of the old system of farming remained

unaltered. That such a system of cultivation had been able to maintain the Scottish people for so many centuries, albeit on a slender and unsure diet, suggests that in its time and in its way it worked well enough. The commentators of a later generation who recalled it, though they could find little to commend, were perhaps over-critical in looking back at something they were glad they had superseded. And perhaps their recollections were of a system of farming only in its process of breaking down, outmoded and unable to cope with the pressure of a growing population. At any rate, the contemporaries of Burns, however difficult it might be for them to assess such merits as the old forms of husbandry might have, however insufficient their explanations of why it was superseded, were in no doubt about the fundamental nature of the transformation that was accomplished, so complete, rapid and obvious as to deserve the description of a "total and happy revolution." Fullarton remarks that "A stranger, passing through these districts, must be surprised to observe such a multitude of agricultural defects still existing. But his applause would undoubtedly be excited, when he understood the great difference between the present management and that which took place forty years ago." He goes on to describe the "change of system" and the "new system introduced." Aiton, who wrote a later agricultural report, sums it all up in retrospect: "Never was so great a change effected on the condition of the people of any district, in so short a period." Of the ministers who contributed to the Statistical Account there are few who fail to note the extent of the changes in farming, and many comment on how quickly these have been accomplished.

The reasons for the revolution in farming in the 18th century after such a long period of little change are many and complex. The opening-up of world trade, the growing population, and the development of new industries with employees divorced from the land meant an increased demand for foodstuffs, and the stimulus of rising prices to spur agriculturists to increased productivity. On the other hand the end of the civil and religious disturbances—the cessation of the persecution of the Covenanters in 1689, the final suppression of the Jacobites in 1746—and the beginning of a new era of law and order made possible a transfer of attention and energies to new interests, and among these an interest in the land became a widespread craze. The hard-headed Aiton explains how the people before the 18th century "were busy with reformations in the church, but in a great measure overlooked the improvements of the soil. . . . An extensive acquaintance with the mysterious, abstruse and disputed points of systematic divinity, was the species of knowledge then generally sought after, and to which the greatest fame was attached. . . . A good crop they imputed to the favour, and a bad one to the frowns of heaven, and endeavoured to procure more plentiful

returns, not by superior industry, or better management, but by greater sanctity, and longer prayers." But it took more than a change of heart or the exertions of a few prominent individuals to accomplish the agrarian revolution. The motivating force that drove forward the changes in Ayrshire was the emergence in the West of Scotland of a new assured market for farm produce. That the sale of such produce to feed the growing industrial population of Ayrshire and Clydeside had become the main function of the Ayrshire farms stands out in page after page of the Statistical Account; and it was this basic change from subsistence agriculture to commercial farming that involved the destruction of the old agrarian system and the establishment of a new régime in the Ayrshire countryside.

"It required extraordinary exertions indeed," said Fullarton, "to bring the County of Ayr in so short a time from the degradation already stated, to that period of improvement, which, if continued for a few years longer, will entitle it to rank amongst the most productive districts in Great Britain." The possibilities of the situation were realised and the first experiments in large-scale farm improvements attempted by several of the landlords of the great estates of Ayrshire. Such men belonged to a class and generation many of whose members combined wide vision with practical realism, and they alone had the power and resources to contemplate the extensive economic reorganisations that were necessary. The lesser lairds could hardly lead the way. "The medium lairds or country gentlemen were frequently driven by their situations and professions into different quarters of the globe . . . their habits and observations had hardly ever been applied to the best of all purposes, the cultivation of their native soil. Any attempts they made were feeble, desultory and unavailing. . . . The small proprietor of 50 to 100 acres was seldom sufficiently active or intelligent to introduce amelioration." And Aiton supplements these remarks of Fullarton by a generalisation: "Proprietors of single farms are generally too ignorant, too indolent and too proud to become industrious. The industry of the first purchaser, seldom extends to the third generation; hence the common adage of the district, the Father buys, the Son builds, and the Grandson sells." As far as the tenant farmers were concerned, they felt little inclination to attempt improvements which involved risk, effort, doubtful returns, and if successful the likelihood of another reaping the benefit by an increased rent being levied. Even among the great lords and large proprietors, general schemes of developing their extensive estates seemed at first quite beyond the means of 18th-century rent rolls, and it was left to a few to show the way. Among these promoters of agricultural improvement the names of the Earls of Eglinton and Loudoun stand out.

Alexander, tenth Earl of Eglinton, "the first nobleman, in point of rank and opulence in the county, may be justly considered the reviver of agriculture in Ayrshire." He was a Montgomerie, descended on his father's side from Anglo-Normans who came to Scotland in the 12th century, inherited the Eglinton estates in Ayrshire in the 14th, acquired the hereditary Bailliary of Cuninghame in the 15th, were elevated to an earldom in the 16th; and successive earls appear from time to time in the pages of Scottish history. His mother, a Kennedy of Culzean, was the accomplished beauty to whom Allan Ramsay dedicated "The Gentle Shepherd." Alexander succeeded in 1729 as a boy of six to the earldom and the extensive estates at Eglinton near Kilwinning and others in Ayrshire and Renfrewshire. His education, begun locally in Irvine, was completed, according to the new fashion, in England, and much of his time was spent there, socially, and as a Scottish representative peer in the House of Lords. He died a bachelor in 1769, his life cut short when he was shot by a poacher at Eglinton; and he was succeeded by his brother Archibald, who became one of Burns's patrons.

It was while Earl Alexander was still in his mid-twenties, not many years before the birth of Burns, that there were initiated at Eglinton those schemes of agrarian improvements that were to earn for the Earl recognition as the pioneer of the new farming in Ayrshire. Though young and inexperienced, with no proven examples to follow, yet he had certain favourable circumstances. His father had cleared the estate of a load of debt; the Eglinton policies included over 3,000 English acres of the most fertile soil in the district; and a government payment in 1748 of £7,800 in recompense for the heritable jurisdictions that had recently been abolished supplied ready capital. The Earl had the opportunity to study improved farming techniques in England, the resources to hire experts at considerable expense, and the enthusiasm to plan and superintend personally the work of improvement.

We can allow the local historian of a later date some licence in dramatising the transformation scene:—

"I have lang been of the notion and the idee that not only Eglintoun but also the haill boun's of Ayrshire and the Gallowa's are muckle in Earl Sanners' debt. Before he cam hame the kintra side was in a very wild and unsettled condition. He found it a moss and a wilderness, and he left it smiling and blooming like a rose. . . . Coming hame aboot the '48, he brocht wi' him, frae various pairts of England and the Lothians, ploughmen and folk who kent a' aboot the dairy and drilling and fallowing, the setting o' neeps and the rotation o' the craps. And, like the wee

Pechs, they fell to their wark and wrocht ferlies in a blink. A great deal was dune, too, in the way o' mending the breed of horses and kye, till noo an Ayrshire is far kent and noted as baith the bonniest coo and the best o' milkers. Nor was it lang till the vera face o' the kintra, runckled and soor-leukin' as the auld maid's lang negleckit, put on the rosy bloom and happy smile of the expectant wife. Miles of fences were made and the bare parks and hill-sides were baith sheltered and adorned by a cleiding of m'unts and belt of trees; thorn dykes were set, and mony a sweet-smelling flower and southern bush made the dark woods of Eglintoun look gay. The Earl was here, there and everywhere on his farms, arranging the marches and dykes, breaking up auld muirland grun', or laying aff the roads and plantin's, and opening up stane quarries, or felling here and there a tree that hid some noble view. And not only was he of this eydent, throughal turn, but he was affable and condescending to a degree. He would crack to the cottars and the farmers aboot their weans or their craps as if he were ane o' themsel's, and he gaed oot and in amang them, clippin' his beard a' the time wi' a wee pair o' shears, or roosin' here a chicken-cavie or there a braw wee lassock's cheeks, till he was the idol and delight of a' the mithers o' the kintra-side."

About the same time and not very far away, John, fourth Earl of Loudoun, was carrying out similar renovations. Earl John, too, could trace back his ancestry directly to an Anglo-Norman incomer of the 12th century, one to whom the barony of Loudoun was granted, and whose descendants, the Craufords, and later the Campbells, of Loudoun, became hereditary Sheriffs of Ayr. They benefited from the spoils of the church at the Reformation, extending their Ayrshire estates; the barony in the 17th century became a lordship and soon after an earldom; and the various earls played active parts in the politics of 17th and 18th century Scotland.

Earl John set out on a military career and in his thirty-six years of active army service played a significant part in the suppression of the '45 Rebellion; ten years later served in the American colonies, for a time as Commander-in-Chief of the British Forces there during the Seven Years' War with France; and later still held a command in Portugal. For most of that time and afterwards he was one of Scotland's sixteen representative peers in the House of Lords, being a member for forty-eight years in all, part of the time being joined by the Earl of Eglinton. Like Earl Alexander he remained unmarried. On his death at Loudoun Castle in 1782, aged seventy-seven, he was succeeded by a cousin, who died not long afterwards, in the year of the Kilmarnock Edition, to be followed by a girl who when she grew up married the Earl of Moira, later Marquis of Hastings.

Earl John had a Burns connexion in that the farm of Mossiel was on an outlying section of the Loudoun estate. It was soon after he succeeded to the estates and the honours of Loudoun that the young Earl commenced improvements, starting before the Earl of Eglinton, but with schemes which were less far-reaching to begin with, his attention and interest being no doubt diverted by other commitments. Yet even when abroad he was frequently sending home specimens of trees to grace the plantations he had established around the castle, which in a generation's time moved Robert Tannahill to praise them as "Loudoun's bonnie woods and braes." With his retirement from active service in 1763 the fifty-eight-year-old Earl was able to devote closer attention to the personal supervision of the estate and Aiton remembered how "His Lordship frequently collected his tenants together at Loudoun Castle, conversed with them on rural affairs, set his own lands, laid off roads, and attended to every improvement." The main part of the estate covered some 10,000 English acres in Loudoun parish, whose minister remarked in the Statistical Account on the man and his work: "He had both a great taste and great quickness of parts. He prudently began with making roads through the parish as early as the year 1733; and an excellent bridge was, by his influence, built over Irvine water; and the road from thence, and from his house to Newmilns, was the first made road in the shire of Ayr, which was done by the statute work. . . . At the same period Earl John began to plant and inclose; he is said to have planted above one million of trees. . . . They were all planted from the year 1733, progressively, to the year 1775. The number of farms planted and inclosed are about fifty, inclosed and subdivided into small farms, from 20 to 30 acres each; in all about 6,000 acres. Add to this about 1,570 acres; the whole of which is inclosed, and amounts to 7,570 acres, including 95 acres of natural wood, and 250 acres of planted ground. About 1,000 acres in sheep farms are not yet inclosed. . . . The late John Earl of Loudoun . . . deserves the name of the father of agriculture in this part of the shire."

The Earls of Eglinton and Loudoun had one thing other in common, an acquaintance with the young James Boswell of Auchinleck and his celebrated friend Dr. Samuel Johnson. Indeed it was Earl Alexander who introduced Boswell to London society, and of him his protégé wrote: "All who knew his lordship will allow that his understanding and accomplishments were of no ordinary rate. From the gay habits which he had early acquired, he spent too much of his time with men, and in pursuits far beneath such a mind as his. He afterwards became sensible of it, and turned his thoughts to objects of importance; but was cut off in the prime of his life. I cannot speak, but with emotions of the most affectionate regret, of one, in whose company

many of my early days were passed, and to whose kindness I was much indebted." When Johnson heard of the Earl's having been killed he was incensed: "Whoever would do as Campbell did deserves to be handed; not that I could, as a jurymen, have him found legally guilty of murder; but I am glad they found means to convict him." The famous pair on their Scottish tour called at Loudoun Castle, and Earl John "jumped for joy" to see them. Boswell had praise for him as well: "I cannot here refrain from paying a just tribute to the character of John Earl of Loudoun, who did more service to the county of Ayr in general, as well as to individuals in it, than any man we have ever had. It is painful to think that he met with such ingratitude from persons both in high and low rank; but such was his temper, such his knowledge of 'base mankind,' that, as if he had expected no other return, his mind was never soured, and he retained his good humour and benevolence to the last. The tenderness of his heart was proved in 1745-6, when he had an important command in the Highlands and behaved with a generous humanity to the unfortunate. I cannot figure a more honest politician; for, though his interest in our county was great, and generally successful, he not only did not deceive by fallacious promises, but was anxious that people should not deceive themselves by too sanguine expectations. His kind and dutiful attention to his mother was unremitted. At his household was true hospitality; a plain but a plentiful table; and every guest, being left at perfect freedom, felt himself quite easy and happy. While I live, I shall honour the memory of this amiable man."

Others, of course, were making experiments on their estates, too, but none on the same scale. The Statistical Account records numerous instances of proprietors planting and enclosing from the 1720's onwards, presumably inspired by the new ideas put about by the Society of Improvers in the Knowledge of Agriculture, which was formed in Edinburgh in 1723. But apart from the efforts of the two Earls, it was not till the 1770's that the agricultural revolution really got under way in Ayrshire; but once it commenced almost the whole of the lowlands were affected and transformed within a decade or so, just at the period when the Burns family were at Lochlea. "I remember," said Aiton, "to have seen all that deplorable state of things which he (*i.e.*, Colonel Fullarton) so ably describes, not merely in some remote or neglected corner, but in what now forms the most fertile districts of Ayrshire. Such was the miserable state of agriculture, over the whole parish of Kilmarnock, till after the year 1770, and in most of it till 1785; and this parish was not behind others in that quarter of the country, for the same barbarous system prevailed over the whole county, with a few exceptions, till about 1780." "Almost twenty years ago," wrote the blind minister of Kirkoswald in 1794, "the husbandry of this parish underwent a total and happy revolution.

The farms were considerably diminished in extent, the boundaries were properly straightened, and they began to be inclosed and subdivided with ditch and hedge. Almost, in the course of ten years, the farms in the whole parish, were thus inclosed and divided."

The large-scale renovations began on estates in North Ayrshire in the vicinity of the Irvine Water. At Loudoun, Earl John accelerated his pioneering efforts following retirement from active military service in 1763. At Eglinton the work of Earl Alexander was carried on after his death in 1769, under his brother. On nearby estates others followed these good examples: Mr. Orr of Barrowfield, who started to improve Grougar in the 1770's; Dr. William Fullarton on his return from India in 1770, at Rosemount; Mr. Neil Snodgrass who took over Cunninghamhead in 1771; and two who require special notice—Colonel William Fullarton of Fullarton and Mr. Alexander Fairlie of Fairlie.

Colonel William Fullarton had succeeded in 1759 at the age of fifteen to the estate of Fullarton in Dundonald parish, on which his father had already carried out some innovations. Though becoming a soldier who had lengthy experience in the field, a politician who twice represented Ayrshire in the House of Commons, and interested in various aspects of science and literature, the Colonel found time both to improve his estate and write for Sir John Sinclair, the first President of the Board of Agriculture, a "General View of the Agriculture of the County of Ayr," which has been quoted extensively in this chapter. His interests in literature brought him naturally into contact with Burns. Though it was not till 1791 that they met and began to correspond, Burns knew of Fullarton while the latter was still a student under the tutorship of one Patrick Brydon. In "The Vision" Burns refers to "Fullarton, the brave and young," and

Brydon's brave ward I well could spy,
Beneath old Scotia's smiling eye;
Who calls on Fame, low standing by,
To hand him on,
Where many a Patriot-name on high
And Hero shone.

A neighbour and a distant connexion by marriage was Alexander Fairlie, of Fairlie House. Burns's father had worked on this estate before he came to Alloway, and Robert himself stayed briefly on it, with a half-sister of his mother's called Jean Allan, at Old Rome, in 1786, to escape a warrant for his apprehension put out by Jean Armour's father. Fairlie himself had no connexions with Burns. He took four copies of the Edinburgh edition, but he had seemingly no interest in literature.

Among his estate workers was one Josey Smith, a ditcher, who was fond both of versifying and of whisky-drinking. "Go and sing ballads and be d——d to you," Fairlie told him. Josey obliged with the first part of the request and composed a song about his master:—

On the green banks of Irvine lives Fairlie of Fairlie,
Who oft speaks of good things, and does them but rarely.
Lord Eglinton's tenants they walk very barely,
Being robb'd of their riches by Fairlie of Fairlie.

It's in the low regions, oh! how we will fret,
When there is no farming or farms for to set!
The devil and him they will scold it right sairly,
And H—— will resound with the shrieks of auld Fairlie.

Truly enough, farming seems to have been his whole life, and in this sphere his name became as well known as those of the two Earls, credited as the author of the "Fairlie Rotation," which was long practised in Ayrshire. A bachelor like the other two celebrated pioneers, he managed not only his own estate from 1744 till 1803, but after the death of Earl Alexander he was appointed by Archibald, the eleventh Earl, to take charge of the Eglinton estates, where he found full scope for his ideas. "Persevering with uncommon firmness in combating the prejudices of old tenants, dividing the lands and making restrictions suitable to the soil and situation, he has rendered the farmers, in general, more wealthy and respectable, and the lands more valuable." Aiton recalled hearing him criticising a tenant for over-ploughing. The farmer insisted on blaming the weather for the failure of the crop, as farmers will. Mr. Fairlie, provoked by his obstinacy, after taking hastily a large pinch of snuff, replied with some warmth, "If you will only comply to my improved plan of plowing one-fourth of your farm, you will have the *best* of crops *in spite of a season*."

From the banks of the Irvine Water the examples set by these improving lairds spread to various parts of Cuninghame, where from the 1780's notable work was done. Colonel William Blair of Blair; Colonel Muir of Caldwell; the Brisbanes of Brisbane; and Mr. James Dunlop of Dunlop, one of the thirteen children of Mrs. Dunlop, that most assiduous of the correspondents of Burns.

Further south others also set about the work of improvement, along the banks of the Ayr, in the heart of the Burns country. Among the earliest was Mr. Mungo Smith, of Drongan, who began in 1770, and Rev. Mr. Steele, of Gadgirth, who started even earlier. The general improvement came in the 1780's and many of the proprietors celebrated in "The Vision" and other poems were

just at that period busy with their renovations. There was Sir Thomas Miller, Lord Barskimming—"An aged Judge, I saw him rove, Dispensing good"—and his son Sir William, "Barskimming's guid Knight"; General Stuart of Stair "who far in western climates fought with trusty sword"; the Boswells of Auchinleck, Lord Auchinleck the father and son James the biographer, "him wha led o'er Scotland a', the meikle Ursa Major"; in Ballochmyle the Whitefoords were succeeded by Claud Alexander, brother of that "bonnie lass," the "lovely Wilhelmina"; and the Oswalds of Auchincruive. Even gentle ladies were actively interested—the Countess of Dumfries at Dumfries House, in Cumnock parish; and the near-centenarian Dowager Countess of Loudoun at Sorn Castle.

About the same time, some of the chief proprietors in the more fertile parts of South Ayrshire were engaged in similar large-scale estate improvements. In this district the way was led by Sir Adam Fergusson, "the aith-detesting, chaste Kilkerran"; Thomas Kennedy the Earl of Cassillis, Mr. Kennedy of Dunure, Mr. Gilbert Blane of Blanefield, and Sir Andrew Cathcart of Carleton.

By 1811 Aiton could write: "The whole land in Ayrshire, except some part of the hill pasture, has, in the course of the last forty years, been inclosed. . . . Extensive tracts of arable land have been fallowed, straighted, and reduced to proper form. Immense quantities of manure have been applied, the most liberal rotations adopted, and the most luxuriant crops of the best grain produced. . . . The dairy is carried to a pitch altogether unequalled in any other part of Scotland . . . the land has been rendered much more sightly, and . . . its value has been raised more than fifteen hundred per cent. . . . The tenants, where they have been sufficiently industrious, and not borne down by misfortunes, or extravagance, are now opulent, decent and highly comfortable. Never was so great a change effected on the condition of the people of any district in so short a period."

The essential feature and *raison d'être* of the agricultural revolution was the development of what was primarily a subsistence economy into commercial farming. In this process the aim was increased production and the various innovations were means to this end—augmented crop and stock harvests; to accomplish this the improvements of the soil and the introduction of new techniques of husbandry; and as part and parcel of the reformation, the enclosure movement and the creation of new farms.

As land is the basis of farming a good deal of attention had to be devoted to the soil and its welfare. The old hump-backed riggs were flattened and cleared of impediments—sometimes

boulders had to be blasted away—and the land was renovated by fallowing, re-ploughing, trenching, liming and manuring. The distinction between croft and outfield was abandoned and all parts of the existing cultivable land received equal attention. More land was brought into use, not only what had previously been rough pasture but extensive tracts of moorland and even moss were reclaimed, especially in north and east Ayrshire. Aiton, who was specially interested in this, records instances at Eglinton, Shewalton, Swineridgemuir, Montgreenan, Fenwick, Grougar, Loudoun, Galston, Riccarton, Muirkirk and Glaisnock. Proper rotations were introduced on the improved fields, to make best use of the land and prevent over-cropping which was a constant temptation to the less far-sighted farmers. The most popular course was one introduced by the Earl of Eglinton, developed by Fairlie of Fairlie and others, and spread throughout the county as the "Fairlie Rotation." The sequence of crops followed was:—

- 1st Year—Oats, or occasionally Wheat.
- 2nd Year—Oats again originally, but latterly a root crop like Potatoes or Turnips, or a green crop like Kail or Beans was preferred.
- 3rd Year—Oats or sometimes Barley.
- 4th Year—Hay, from Ryegrass and Clover sown together
- 5th-9th Years—in Pasture.

The Fairlie rotation became something of a fetish, but in the first stages of improving the land it proved sound policy for the landlord to insist that such a course be rigidly followed, to prevent over-cropping. Only one-third or even one-quarter of the land could be in tillage any one year. Latterly the rotation was modified to suit local conditions of soil and situation in different parts of the county. From time to time, at stated intervals, prescribed quantities of fertilising agent had to be applied to the fields, since as the local saying went, "Muck is the mother of the meal chest."

To counteract the acidity of the Ayrshire soils, lime had been used in the 17th century if not before, but after the 30's and 40's of the 18th century it became the "staple manure," while farm-yard dung and, near the coast, seaweed were used in increasing quantities. One obstacle to improvement in a rainy area like Ayrshire was the tendency of the soil to become waterlogged. Various drainage schemes were attempted, but none of the methods devised seems to have been particularly successful till the 19th century, when tile-draining was introduced by the Duke of Portland in 1825, and thereafter became general.

As far as the actual crops were concerned, new strains of grain were tried and proved, sown grasses were introduced, and new crops like potatoes and turnips became popular. Oats remained, as always, the "great staple of provisions in the

county," and its output greatly increased both for cattle and human consumption. Wheat, though it was being more frequently sown at the very end of the century, was even then an occasional crop, for which Ayrshire is not really suitable except in the lighter and drier soils by the coast. Barley or Bere—and especially the hardier quick-growing variety called Bigg—had its place along with Oats on the old ferm-touns, and remained common, but its cultivation fell off after the Malt Tax of 1725. Other grain crops, like Rye or Rape, were seldom grown. The introduction of root crops was an important innovation. Potatoes, first grown in Scotland as a garden crop early in the 18th century, were introduced to the fields by the middle of the century, and by the end were being grown all over Ayrshire, on almost every farm, as well as in gardens and allotments near the towns, food both for humans and for cattle. Other root crops were also tried—Carrots, Parsnips and Turnips, but even in the 1790's not more than a score of farms in the county were growing these last. "Turnips have been tried, but with no great success, the soil being too wet, and the servants have an aversion to them, as they are thereby exposed to much cold dirty work." Among the green crops, Peas had formerly been common, but by the latter half of the 18th century they were seldom any longer grown alone, being superseded by Beans which were little known before 1770; about the same time Kail was being grown as a field crop and Cabbages were being tried. Among the innovations, many of the farmers could not appreciate the importance attached by the improvers to the new sown grasses—a deserved importance, because pasture-land was to become such an essential element in the Ayrshire dairy economy that was being evolved. It was about 1760 that Ryegrass was introduced, to become general in the 1770's, along with the clovers and other grass mixtures that were being tried to clothe the field with the rich green sward that later generations might almost describe as Ayrshire's chief crop. The remaining crops, Flax and Hemp, were still grown in small quantities, but they were rather frowned upon as tending to exhaust the soil, and in any case the demands for flax were diminishing as the new imported cotton was coming into its own.

New implements were being tried as part of the efforts to improve crop husbandry, but the first experiments had a limited success. The farmers had to wait for the development of the iron trade before it proved possible to introduce satisfactory new equipment. The old wooden Scotch plough was still as good as any of the newer imported versions, on the heavier lands at any rate, and Fullarton felt that in the future digging and trenching might prove a more satisfactory general method of tilling the soil. In fact it was not till after 1790 that the Scotch plough was generally abandoned. Seed was still sowed broadcast except latterly in the case of turnips, which were drilled. Harvesting was

done by sickles, and the grain, after being stooked in sheaves till dried, was then stacked and winnowed either by flails or by the new threshing machines.

One thing that was quite essential was an improved means of transportation—not merely of the farm-produce to market, but of crops, dung, lime and the other loads about the farm. How primitive the arrangements were in the early 18th century and before can hardly be conceived. Fullarton has already been quoted in his reference to the use of "cars or sledges" and the primitive carts that were, went on "tumbler-wheels, which turned with the axletree, and supported the wretched vehicle, hardly able to draw 5 cwt." He also noted that "about forty years ago, the late Lord Cathcart being extremely desirous of improving his estates, ordered a number of carts to be made, and given gratis to his tenants. But they were at that time so little accustomed to these machines, and the roads were so bad, that very few accepted of his Lordship's present." Some of the improvers indeed regarded the making of proper thoroughfares as an essential preliminary to their schemes. Earl John of Loudoun did, and according to the Statistical Account he remembered "when there was neither cart nor waggon in the parish, but his father's, Earl Hugh's, and his factor's. Now there are above 250 in the parish, besides waggons for leading grain, peats, &c. Formerly they carried home their grain in sledges or cars, and their coals on small horses." The same story is told in the Account of other parishes. In Stair "all the grain, manure, coals and other articles, used to be transported from one place to another in sacks or in creels, on horses' backs," and it was only within recent years that carts had been introduced. Even in the remote parish of Colmonell "thirty years ago, there were only two in the parish, but now there is scarcely a farmer who has not one, two, three, or some even more in his possession." Even so, the ordinary farm carts of the end of the century could carry only from 10 to 12 cwt.

The most spectacular advance of 18th-century Ayrshire farming was in stock raising, with the breeding of the new dairy cattle. Owing to soil and climate Ayrshire could not hope to become principally an arable region, though for a time the high grain prices did stimulate attempts. Cattle farming was recognised as a very appropriate line of specialisation, to meet the growing and assured large-scale demands for dairy produce.

In the early 18th century and before the cattle in Ayrshire were small in stature, usually black or dark brown, sometimes rigged with white, with crooked irregular horns, presumably belonging to the indigenous Scottish breed of Kylo cattle. Both in beef and in milk yields they were of poor quality by later standards. In one corner of the county, however, a better type

of beast was common. As far back as the beginning of the 17th century the parishes of Dunlop and Stewarton had been noted for their dairy produce, and Fullarton confirms that there "a breed of cattle has for more than a century been established, remarkable for the quantity and quality of their milk in proportion to their size. They have long been denominated the Dunlop breed." In the course of the 18th century this and other existing stock was vastly improved by better feeding, the provision of adequate shelter, and judicious selection in breeding. A great difference was brought by feeding alone. Yet so accustomed were the Ayrshire farmers to what their modern successors would account as starving beasts that even in the early 19th century Aiton had to preach that "the cow gives her milk by the mou'," and insist that many cattle were still being undernourished. They should be fully fed all the year round, even when they were dry, he said, and far more use could be made of turnips and other winter feeding stuffs.

There is a good deal of doubt as to how far the breed was improved by crossing with imported beasts of other strains. Round about the middle of the 18th century several landlords brought from England cattle of various types, and introduced them to their local herds. For example, Mr. Bruce Campbell, factor to the Earl of Marchmont, brought some to Sornbeg in Galston parish, and their progeny were distributed through other farms in central Ayrshire. Other importations were made by Mr. John Dunlop of Dunlop, Mr. John Orr of Barrowfield, the Earl of Glasgow, and probably the Earls of Eglinton and Loudoun as well. At any rate, from about 1770 onwards stock of improved dairy cattle spread rapidly over north and central Ayrshire. These new brown and white mottled cattle were probably derived from the older Dunlop breed, improved by crossing with some imported types, and were the ancestors of the modern Ayrshire breed. Known first of all as "Cuninghame cattle," by the end of the century they were to be found in all parts of north and central Ayrshire and even in the lower parts of Carrick. They did not immediately supersede the "black cattle," a name which was applied to the older types, which were usually though not always of that colour. According to the Statistical Account these black cattle were still quite common in the 1790's throughout Ayrshire, especially in the upland districts of Carrick, where by careful breeding and feeding an improved beef breed of Galloway cattle had been evolved from the indigenous stock. But wherever dairy cattle were sought, it was obvious that the new Ayrshire breed were "the best race for yielding milk in Great Britain or Ireland, not only for large quantities but also for richness and quality." By the turn of the century they were becoming common not only in Ayrshire but in neighbouring counties—Robert Burns recommended that they should be introduced to Dumfriesshire

—and even further afield. When William Cobbett visited Ayrshire in 1832 he recognised their worth: "I was so delighted with these cows that I resolved that my country should not be wholly without them; and, therefore, a very kind friend at Newmilns is to send me a bull and ten cows."

The developments in cattle breeding overshadowed those in other types of stock rearing. The indigenous blackfaced sheep maintained their sway on the upland farms, and though they were sometimes improved by cross-breeding with imported breeds, and some attention was devoted to sheep breeding on the lowland farms as well, there was in some cases a diminishing interest in sheep. Cattle farming was proving more profitable, and there was in any case a prejudice against keeping sheep in enclosed fields. Eventually sheep on the lowland farms were restricted to a few "pet sheep"—tame specimens of imported breeds kept to supply the farmer's wife with wool. There was also only a limited interest in horse breeding. The demand for draught animals was met by purchasing from Lanarkshire horses of the new Clydesdale breed that was being evolved there. It was typical, of course, that various landlords made their experiments with other types of stock—oxen, mules, asses, rabbits and pigs. But only in the last instance was any significant contribution made. Finding that "hogs"—as they were then called—could be largely maintained on the whey by-product of cheese-making, the traditional superstition against swine was overcome, and a great number of farmers began to keep and fatten pigs for stock and latterly for bacon.

The various improvements which have been detailed were carried out by the landlords and their tenants on the new farms which were established. Nine out of ten of the arable farms in the county of Ayr, and many of those devoted to pasture, may be considered as new farms, in so far as regards size and contiguity, site, state of the houses, and modes of culture and occupation. New farms have also been formed, in various parts of the county, from barren sands, or from muir or waste ground, outfield land, &c., which had, till of late, been in a great measure overlooked or considered as but of small value. These new farms, which Aiton refers to, were created by the regrouping of the old farm-touns, with their open fields and rough pasture, into holdings of the modern type. Sometimes the old farms were subdivided, sometimes several were "monopolised" into a larger unit; depending on the one hand on local conditions, and on the other on which side the landlord took in the current controversy regarding the best size for a farm. The method of enclosure too varied. Sometimes existing land divisions were retained and enclosed, but there were more ambitious schemes where the land was mapped and laid out

by trained surveyors. As there were few common lands of the type found in England, there was no necessity for Scottish landlords to seek parliamentary authority for their enclosures; the movement proceeded as the proprietor decided, as old leases came to an end and the land became available for improvement. "Enclosing," says Aiton, "was almost unknown in Ayrshire, till near the middle of the 18th century. Except near some of the noblemen and gentlemen's seats, and the yard dykes at farm houses, there were no dykes in Ayrshire, till about the year 1750, and very few till after 1760. Nine-tenths of the fences in Ayrshire have been formed since the year 1766." The most popular form of fence was the thorn hedge with a ditch alongside, and sometimes there were dykes of stone and occasionally turf. The dry-stane dykes were common on the uplands, and sometimes in the lowlands ruined castles and abbeys provided a convenient quarry.

Usually the boundary of the new farm was first defined, the area divided into three "breaks," and subdivided into fields later. Sometimes the work of enclosing was carried out by the landlord, sometimes by the tenant. Always the new lease stipulated how the new farm should be managed. Only one of the three "breaks" might be cultivated to begin with, the remainder being rested till in course of the new rotation it might be brought under the plough. Formerly leases had usually been for 19 years, but to accommodate the nine-year Fairlie Rotation the new leases were generally for 18 or sometimes 27 years; or when only a fourth instead of a third was to be ploughed, for 12 or 24 years; though sometimes the traditional 19-year lease was retained. Overcropping, or failure to apply manures as prescribed, or deviation from the stipulated forms of management, were penalised by fines, and where necessary by expulsion.

The enclosure movement was carried out, of course, at different rates and with varying effectiveness from place to place. A broad distinction can be drawn between the great estates and the smaller holdings, especially those of the "bonnet lairds" who were so common in north Ayrshire. On the great estates the proprietors with the help of surveyors and other expert assistance completely replanned and laid out their property with geometrical symmetry, creating farms with fields levelled, amply furnished with hedges, trees, roads and new farmhouses conveniently situated. Considerable areas were devoted to woodland. Ayrshire was never totally devoid of trees and even at the beginning of the 18th century there were still considerable remnants of natural wood in various places, around the castles and on the banks of streams. But this was augmented many times by the efforts of the 18th century estate owners, most of whom devoted a good deal of attention to planting. On the great estates the numbers of

trees planted were counted in millions, established in woodlands around the mansion houses and in strips and along field boundaries, to provide shelter and timber, and enhance the beauties of the landscape.

On the smaller estates where capital was lacking the landscape was modified rather than replanned. The field system of the new farms was based on the older land divisions, the fields were less adequately levelled, there was far less planting or roadmaking, and in many cases the old farmhouses though inconveniently situated remained.

In retrospect it is easy for us to look back to those former days, select from the records the events that seem significant, examine the careers of the persons whom posterity has remembered, and trace the pattern of progress through the web of circumstance. It is all so obvious that we might, and often do, overlook the fact that time lends a different perspective to the view. To the men and women who were living in the 18th century the implications of all the changes that were altering their lives could not be so clear—any more than in our own 20th century we can understand where the world is heading. To some the changes meant progress. Others agreed rather with Burns when he complained that "this country has been, and is still decaying fast." Most must simply have been puzzled and confused. Not even the optimists who were confident of ultimate improvement could predict which of the multifarious experiments being carried out in farming would prove successful and which futile. The promoters of improvement had to swim against a tide of difficulties and doubts in the blind hope that the shore—if there was a shore—was not beyond their reach. Their difficulties were many; technical, psychological, and financial are the terms we should use nowadays to classify their character.

The technical problems involved in transforming the farming system were enormous. The improving laird was in every sense an innovator. His task was not the relatively straightforward one of transforming his estate according to a recognised plan or of introducing accepted techniques, but of creating as he went along a new system and new techniques by experimentation, evolving by trial and error methods which were suitable for local conditions. It was not enough to imitate what had been practised successfully elsewhere, or bring in experts familiar with conditions in other parts. Fullarton and Aiton each remarked on the errors that had been thus committed: "When the practice of winter-ploughing, so prevalent in dryer climates and in lighter soils, was attempted on the deep and tilly parts of Ayrshire, the land was so drenched as to yield a scanty produce. In like manner, numberless improvers lost their crops by sowing early, in imitation of their summer neighbours; and many a field of clay, by summer fallowing in a rainy season, was rendered only fit to be converted into brick and

mortar. When the high and crooked ridges were attempted to be cleared and levelled, the productive soil was buried and a sterile till was thrown upon the surface. In short, when any person implicitly adopting the management of other counties, laid no other limitations upon his tenants than such as were adapted to places, where the land was already dressed and drained, the soil and climate dry, and a proper rotation of crops established; he was invariably disappointed in his objects." "Some proprietors in Ayrshire, formerly employed on their estates overseers from England and the Lothians. But some of these, though eminently qualified to conduct similar operations in their own country, did not always advert to the difference of the climate, soil, state of cultivation, and other local circumstances. By pursuing plans and systems, suited to a different state of things, they often found themselves baffled, the expectations of their employers disappointed, and the prejudices of the country people confirmed. . . . The consequences were, that intended improvements often turned out a waste of labour and expense; and the proprietors who had engaged in them, with laudable intentions and elevated expectations, were disappointed, and abandoned their improvements with loss and disgust." "Others, again, who have shaken off the trammels of prejudice, and discovered that improvements are practicable, too often become over sanguine in their expectations of accomplishing them. They hastily embrace notions and try schemes of improvement, founded on unfair and partial views of the subject; plausible harangues and well told stories of extravagant projectors; and their own abstract reasonings *a priori*, too rashly and incautiously acted upon. Such persons, with the best intentions, frequently injure themselves, and confirm the ignorant and prejudiced in their errors by attempting improvements that are extravagant and unnatural."

The risks of making innovations were obviously great, and it was wise to be circumspect. "The most substantial improvements," concluded Aiton, "have been made by the natives, who have traversed other districts, and only attempted at home what they found to be practicable, all circumstances considered. Their operations might fall short of what was done elsewhere, or of what might have been practised, even there at the time; but the ideas of cultivators, as well as students of other sciences, must be allowed some time to expand. Improvements in agriculture can only be introduced by piece-meal; and a person who would attempt to raise at once the cultivation of any district, from the deplorable condition which has been described, to all the perfections of which it may at some future period become susceptible, would act the part of one who would attempt to reach the top of a ladder, without raising himself by the intermediate steps."

The safest and surest methods of improvement for this area could best be formulated by interchange of opinion and experience.

Nationally, a Society of Improvers in the Knowledge of Agriculture in Scotland had been formed in 1725, with the fathers of the improving Earls of Loudoun and Eglinton among the promoters; and it was succeeded by what is now the Royal Highland and Agricultural Society, formed in 1784. Locally, in Ayrshire, a "Society for improving of agriculture and manufactures in the Shire of Ayr" was formed about the middle of the century by the Earl of Eglinton, who presided over it himself. This was possibly the earliest district Farmers' Society in Scotland, and it offered to insure farmers a guaranteed price to induce them to adopt their recommended croppings. A Kilmarnock Agricultural Society was formed in 1786, holding monthly meetings for discussion of farming topics, and organising ploughing matches and cattle shows. A similar society, with less frequent meetings, was formed in Carrick. And in other places like Galston and Newmilns smaller societies for local farmers were formed. "Formerly," said Aiton, "the only topics of conversation, when farmers met, were either some disputed or mysterious point of faith, some marvellous or legendary story, about some clergyman, disputes or rather quibbles between sectarian parties, or fearful tales about ghosts, wraiths or witches. But now, wherever farmers meet, the conversation generally turns on agricultural subjects, and as iron sharpeneth iron, so doth one farmer instruct another, in the useful Art of Husbandry." By such methods ignorance was dispelled, practical ideas copied or improved upon, and scientific methods of farming spread not only among the landlords but among the tenantry as well, and so effectively that complaints were made of competent farmers being unnecessarily hindered from making further improvements by restrictive leases.

But before this came to pass a great many prejudices had to be overcome. Psychologically, both proprietors and tenants of the early 18th-century had to be conditioned to appreciate the merits of agrarian reform. As far as the landlords were concerned, estates were often neglected in the exciting days of strife in church and state; and even after the Union of the Parliaments in 1707 some of the landlords contented themselves with retiring into indolence, with "hunting or rather . . . poaching, and lounging about idly"; while others more energetic disappeared south of the border or overseas on military or political business. For many of them it required the stimulus of profit and particularly the desire to emulate in wealth the richer landlords of the south, to interest them in improving their estates. In the case of the smaller landlords and tenants, there were deep-rooted prejudices against innovation, partly because it was believed that improvements would benefit only the greater landlords and never the tenants, and largely because of the inertia of long-established tradition. Aiton details some of these prejudices:—

"I am old enough to remember, nearly, the commencement of enclosing the land, and the introduction of ryegrass, as a crop, into the parish of Kilmarnock. The popular prejudice and extraordinary clamour among the tenantry against these innovations were very strong. Restricting the tillage to one-third of the possession was remonstrated against, as an encroachment on the liberties of the people. The conversion of the Statute Labour, cutting the land with new roads and the erection of Toll-bars, were considered such dreadful inroads on their rights, that many suffered themselves to be pained for non-payment of the former, and to be severely fined for shunning or pulling down the latter. The tenants were disposed to consider every improvement that they were required to make on their possession, as tending only to augment their labour and increase the rent rolls of the proprietor; and it was seldom that due pains were taken to remove their prejudices on this head or to place matters in so fair a footing, as to secure to both master and tenant, an equal interest in the melioration of the soil. To such a height did the prejudices of the tenantry then run in Ayrshire, that they prognosticated great evils and pronounced loud anathemas on all who attempted to introduce improvements or to make the least deviation from the good old way. I remember to have heard many woes prognosticated against John Orr of Barrowfield, Esq., and Bruce Campbell, Esq., his factor, when they began their improvements on the estate of Grougar; and when Alexander, Earl of Eglinton, fell by the hands of Mungo Campbell, the general outcry among the lower orders was that it was a punishment inflicted by heaven on the Earl for introducing innovations in agriculture, and raising the rents of his lands. Selling of meal by weight instead of measure was, when first introduced, equally unpopular; and the introduction of winnowing machines was testified against from some of the pulpits under the denomination of *De'il's wind*." Among other prejudices was an aversion to pigs, said to be due to Old Testament tenets against swine, or else to recollections of the Gadarene swine. Asses and mules were likewise unpopular, the victims then as now of a rather inexplicable ridicule.

Some of these prejudices were founded only on the natural conservatism of a people steeped in tradition, and as time went on and innovations proved successful, bringing rewards to tenant as well as landlord, bigotry became less common, as in more recent times Ayrshire farmers have not been loth to accept new methods once they were well proved to be commercially sound. But some of the 18th-century opposition to improvements on the part of the tenantry seems to have been based on more than resistance to innovations because of novelty. Part of the opposition was due to the undoubted hardship imposed on many of the farmers by the enclosure movement. Not all were successful in getting a new farm and making a success of it. Holdings might

be monopolised, a new tenant granted the lease, and the former occupants displaced. Burns, who appreciated the experience of eviction, in the first poem of the Kilmarnock edition, "The Twa Dogs," took up just this topic of the relations of landlord and tenant and how the latter might meet with

... sair disasters,
Like loss o' health or loss o' masters.

Poor tenant bodies, scant o' cash,
How they maun thole a factor's snash;
He'll stamp an' threaten, curse an' swear,
He'll apprehend them, poid their gear;
While they maun stan', wi' aspect humble,
An' hear it a', an' fear an' tremble.

He returned to the same theme in "Man was made to Mourn":—

See, yonder poor, o'er laboured wight,
So abject, mean and vile,
Who begs a brother of the earth
To give him leave to toil;
And see his lordly fellow-worm,
The poor petition spurn,
Unmindful, tho' a weeping wife
And helpless offspring mourn.

If I'm design'd yon lordling's slave,
By Nature's law designed,
Why was an independent wish
E'er planted in my mind?
If not, why am I subject to
His cruelty or scorn?
Or why has Man the will and pow'r
To make his fellow mourn?

Widespread eviction was an inevitable corollary to the enclosure movement and explains a good deal of the opposition to it. But since the movement proceeded intermittently as individual leases came to an end, there was no possibility of organised revolt. So many of our main sources are written from an upper-class point of view—Fullarton a landlord, Aiton a lawyer, the Statistical Account written by ministers who were appointed by landlords. But in these reports there is an occasional echo of popular resistance to the innovations. The minister of Stair reports the destruction of new dykes and gateways there and in Coylton; in Kirkoswald hedges and

trees were uprooted; Aiton in the statement quoted instances other examples; and Fullarton mentions that in several places "the farmers have been so far perverted as to form associations binding themselves under severe penalties never to offer any mark of civility to any person in the character of a gentleman."

Besides the technical problems and the difficulties due to popular resistance to the innovations, the agrarian revolution had its financial complications, affecting both landlords and tenants.

As far as the former were concerned, a chief difficulty in projecting plans of improvement was the lack of capital. Until the early part of the 18th century, according to Fullarton, "The state of markets was in general so low, and public credit so ill established, that no tenant could command money to stock his farm; and few landholders could raise the means of improving their estates. Indeed, when a laird wished to raise money, he was obliged to sell his property, perhaps for twenty years' purchase, or accept loans on wadset: the nature of the obligation being that if the money was not repaid within a specified time, the land became the property of the lender." It was perhaps more than a coincidence that the Earls of Eglinton and Loudoun who pioneered the improvements in Ayrshire farming were each fortunate enough to receive, by the abolition of heritable jurisdictions in 1747, considerable sums in compensation, which could be devoted to developing their estates.

The establishment of banks which could supply credit was an essential prerequisite for widespread improvement. The Bank of Scotland (1695), the Royal Bank of Scotland (1727), and the British Linen Bank (1746) were joined by private local banks from the middle of the 18th century. The first in Ayrshire was that established in the county town by John McAdam & Co. in 1763. This was followed and swallowed up by the ill-fated Ayr Bank of Douglas, Heron & Co. Formed in 1769 by a copartnery of a hundred and forty nobles, gentry, merchants and lawyers from various parts of Scotland, and with its headquarters in Edinburgh, this banking company began business "with a limited capital of £95,000 and unlimited confidence in itself." The circulation of its banknotes was far in excess of its funds, and it lent to the Ayrshire landowners and others seeking capital virtually anything that was asked, just at the time when enthusiasm for estate improvement was in full flood. "In consequence of the ultra-liberality of the credit they allowed, the wide range of their dealings, and their capital being mostly founded in landed property, which could not be rendered promptly available,

the stability of the house was soon shaken, and at last overturned, and it ended in a bankruptcy as extensively ruinous as any speculation of the kind, perhaps, that has ever occurred in the country." A London speculator called Fordyce was the villain of the piece; he disappeared, leaving his firm bankrupt, and various associated undertakings were involved. The Ayr Bank, one of these, crashed spectacularly, with liabilities of over a million pounds sterling. 12th June, 1772, was known as "Black Monday"; hundreds of people in and outwith Ayrshire were ruined. A good many Ayrshire estates changed hands, with landlords forced to sell off to repay loans from the Bank. But though proprietors as individuals might be ruined, the improvements wrought by the borrowed funds remained intact, and from the impersonal point of view of economic development the Ayr Bank did "an immense deal of good."

Upon the dissolution of the firm of Douglas, Heron & Co. in 1774, another Ayr Bank was formed by Messrs. Hunter & Co., with offices in Ayr, Maybole, and Irvine; in 1775 the Bank of Scotland opened branches in Ayr and Kilmarnock, and the Paisley Bank had an office in Irvine. These conducted their business on a more sober footing. And yet a certain amount of imprudent speculation continued among landlords, and from time to time there were further failures. As a result the era of improvement was accompanied by a series of bankruptcies. How widespread they were is indicated by Fullarton. "A great proportion of the landed estates have changed their owners in consequence of individual extravagance, expensive engagements, and the distress occasioned by the failure of the Ayr bank. . . . The greatest number of old families have, within the present century, been obliged to sell their property, embarrassed by the reigning spirit of conviviality and speculation disproportionate to their income." It is well to remember, then, that besides the successes of those who pioneered what have become recognised practices there were also the failures of others whose ideas turned out to be impracticable or whose plans were too ambitious for their means, and who paid the penalties. The new farming was a chancy business, for landlord and tenant alike.

The difficulties besetting tenants of limited means can best be illustrated from the history of the Burns family. William Burnes, born in Kincardineshire in 1721, was a man of farming stock whom circumstances had forced into a series of jobs in estate gardening. Moving into Ayrshire in his early thirties he came ultimately to Alloway where lands had been sold by the Burgh of Ayr in 1755 to several gentlemen who were laying out estates on the banks of the Doon. He worked for two or three, first for a Mr. William Crawford of Doonside, and then for William Ferguson

of Doonholm, Provost of Ayr. On his own he took a feu of a seven-and-a-half-acre plot, where he built a cottage in 1757, married, and managed as a sideline a little dairy with two or three cows.

In 1765 William Burnes became a full-time farmer, leasing from Provost Ferguson the 75-acre farm of Mount Oliphant to pay £40 rent annually for the first six years till Martinmas, 1771, and then to continue if he wished for a further six years at £45. He made a bad start; unable to sell his holding at Alloway he could stock his farm only by a loan of £100 from his "generous master." Even so he could not hire help, the soil proved unproductive, and cattle were lost through accident and disease. The lease had to be continued after the first six years, because there was no alternative of moving elsewhere, and the difficulties of paying an augmented rent were increased when Ferguson died in 1775 and his property was thereafter administered by a less indulgent factor, who was the original for the one depicted in "The Twa Dogs."

Before the lease came to an end in 1777 William Burnes was able to secure the 130-acre farm of Lochlea from Mr. David McLure, a merchant in Ayr, who contributed to stocking the farm. For the first few years from Whitsun, 1777, things went reasonably well, but Burnes began to fall behind in his payment of the £130 annual rent. There was no written lease, and as McLure was himself in some financial difficulties he took legal proceedings and in 1783 took out a warrant of sequestration against the plenishings at Lochlea. Burnes was already far gone in consumption, and died early the following year. "But for death—the poor man's last and often best friend—he might have ended his days in a Debtor's Jail."

Under the pretext that they had been employed by their father, the oldest members of the family were able to present themselves as creditors and secured enough to make a start in 1784 on the 118-acre farm of Mossiel for which they were to pay £90 per annum to Mr. Gavin Hamilton, a Mauchline solicitor, who had leased it from the Earl of Loudoun. Mossiel was run as a sort of joint enterprise, stocked by the individual savings of the whole family, and each receiving wages, Robert and Gilbert getting £7 per year each. Here again they were unsuccessful. Wrote Burnes: "I entered on this farm with a full resolution—Come, go to, I will be wise! I read farming books—I calculated crops—I attended markets—and, in short, in spite of 'the devil, and the world, and the flesh,' I believe I should have been a wise man; but the first year, from unfortunately

buying bad seed, and the second, from a late harvest, we lost half our crops." When Robert went off on his own he had to subsidise the rest of the family at Mossiel.

There is no evidence that the Burns family were inefficient farmers. William Burnes seems to have been well regarded as a head gardener and worked hard enough to make his farming ventures succeed. Even Saunders Tait, the Tarbolton versifier, who scurrilously reviled them from their failure at Lochlea, did not accuse them of incompetence. Robert himself was conscientious enough, unless his literary activities be accounted as unwarrantable distractions. At any rate when it came to the bit later, at Ellisland, he was practical enough to realise that he couldn't run three jobs successfully—farmer, exciseman, poet—at the same time, and gave up the farm. Yet had he been willing to concentrate on it, the evidence would seem to suggest that he might have made a good job of it, perhaps even an outstanding job of it. *Had* he carried on at Ellisland, and *had* he lived a longer span, and *had* Sir John Sinclair continued in office some years longer, who knows but Robert Burns might have been the author of the Dumfriesshire volume in the second series of Board of Agriculture reports. At any rate he was accounted by his contemporaries as a keen-sighted exponent of the new farming. Gilbert and he were ambitious enough to try some flax-growing on their own at Lochlea, for which a £3 prize was won. His letters are punctuated by comments on farming conditions and problems. He could read treatises on agriculture as well as works of literature, and knew his Adam Smith as an economist as well as a philosopher. His views on the improvement of cattle were considered sufficiently meritorious for Colonel Fullarton to mention in his Board of Agriculture Report: "In order to prevent the danger arising from horned cattle in studs and straw yards, the best mode is to cut out the budding knob or root of the horn while the calf is very young. This was suggested to me by Mr. Robert Burns, whose general talents are no less conspicuous than the poetic powers which have done so much honour to the county where he was born." In the 20th century some Ayrshire farmers are beginning to de-horn their cattle as was first suggested by this "unpractical" poet-farmer. Then in the Statistical Account the parish minister of Dunscore authoritatively quotes "Mr. Robert Burns, a gentleman well-known by his poetical productions, who rents a farm in this parish" as to the merits of the new Ayrshire cattle. William Clarke who worked for him at Ellisland "thought he was as good a manager of land as the generality of the farmers in the neighbourhood." That he should be nominated in 1789 as a candidate for the Professorship of Agriculture of Edinburgh University was not altogether as "fantastic" as has been suggested.

The trouble with the Burns family was their lack of capital. They could not afford to stock and rent one of the best improved new farms and had to try their efforts in more modest and less advantageous circumstances. Ferguson and McLure had not the resources themselves to improve their farms, and Mossgiel, though belonging to the Earl of Loudoun, was an outlying property leased to Gavin Hamilton as a sort of summer residence. None of these farms seems to have been enclosed, on the evidence that herdboys had to be employed at Lochlea and Mossgiel, while the family themselves performed this now-obsolete task at Mount Oliphant.

In the competition for farms the Burns family were extraordinarily fortunate—in having Ferguson as a patron to instal them at Mount Oliphant; in leasing Lochlea, even without a written tack; and in getting Mossgiel presumably through Robert's masonic connexions with Gavin Hamilton. Perhaps it would have been better if they hadn't been so well-placed because in leasing the farms they were contemplating something that was quite beyond their scanty resources. Normally folk in their circumstances, with no funds to, speak of had no alternative but to become hired labourers in country or in town. But to avoid the dispersion of the family and satisfy what was for him almost a lust to be a farmer in his own right, William Burnes committed himself and his family to a burden of excessive toil and a starvation diet in what could hardly be otherwise than a hopeless attempt to make ends meet. At Mount Oliphant, Gilbert remembered: "To the buffetings of misfortune, we could only oppose hard labour and the most rigid economy. We lived very sparingly, and for several years butcher's meat was a stranger in the house; while all the members of the family exerted themselves to the utmost of their strength—and rather beyond it—in the labour of the farm. My brother, at the age of thirteen, assisted in threshing the crop of corn and at fifteen was the principal labourer on the farm—for we had no hired servants, male or female." It is almost terrifying to read how the strictest economy was made more strict and, said Robert, "we retrenched our expenses and lived very poorly." There can be no doubt that the privations suffered at Mount Oliphant shortened the life of the father who bore the responsibilities, and of Robert, the eldest son, who shared so much of the heavy burden. And there was no future in it. As the boys grew up they could not all be supported on the family farm and they were without adequate savings to take farms of their own. When Robert began to think at Lochlea of the possibilities of marriage he realised this and departed to try the flax-dressing at Irvine, only to return at the call of family responsibilities.

As a contrast to all this, later on Robert was much better placed when he took over Ellisland for himself in 1788. This

farm also was unenclosed and unimproved, and in a poor state altogether, but for this farm of over 100 acres Patrick Millar granted him a long lease on generous terms. He would pay up to £300 to cover costs of building a farm house and enclosing the land, and himself would plant the necessary shelter-belts. For the first six months Burns might sit rent free; for three years thereafter there would be a modest yearly rent of £50 to pay; thereafter £70 annually till the end of 19 years; the lease might be renewed on the same terms for other three 19-year periods; and as events proved, the proprietor would not be unwilling to purchase the lease if Burns wanted to end his tenure after a shorter spell. Even after giving the Mossgiel folk £180, Robert had in hand from Creech, his publisher, another £300 of his own. He did quite well. Despite the upkeep of wife, weans, sister Agnes, menservants and a maid, and the entertaining of visitors and vagrants; despite literary and social distractions; despite the excise job which took up so much of his time; despite the typical farmer's grumbles at the state of the soil—despite all this the farm came along quite nicely. He built up a stock of nine or ten milk cows, some young cattle, four horses, and several "pet sheep"; and discovered that by 1791 the land was yielding well. In that year he gave up the farm—but not because he had to. The standing crops were roused in August, realising a guinea an acre above the average, and at the Martinmas term in November the livestock and implements fetched equally satisfactory prices. One cow in calf went for eighteen guineas, as compared with the usual price of seven to twelve pounds for an Ayrshire cow. Had the excise not proved more tempting, he might easily have continued at Ellisland and done well enough as a farmer.

The key to success as a tenant farmer in the 18th century was the possession of sufficient funds to stock the farm with some of the improved cattle, to purchase the better strains of improved seeds that were coming on to the market, to acquire up-to-date implements, to purchase vast quantities of lime, to hire sufficient staff to bring the land into good heart; with a surplus laid by to cover a bad harvest or a temporary drop in the prices for grain. Such a man could be fairly confident of a steadily increasing yield from his farm and a rising income as the prices of foodstuffs slowly rose through the years.

Grain prices remained fairly steady throughout the first half of the century, but from about 1750 there was a general rising tendency. In some years they might drop to the old levels, but often they rose far beyond anything previously known, and the average of annual prices continued to increase to the peak year of 1800. Those tenants who were well placed to begin with had excellent prospects; those like William Burnes who started off in difficulties had a limited scope for taking advantage of the opportunities.

The prices of farms was rising like the prices of anything else. In the 1760's the average rent on some of the best land was as low as 5/- to 10/- per acre, and elsewhere even lower; but as farms became vacant dearer prices were charged and competition contributed to force prices higher still. In twenty or thirty years rents were doubled and even trebled. In some instances exorbitantly high rents were charged, but the landlords of the Burns family cannot with justice be charged with rack-renting. Mount Oliphant at 10/- to 12/-, Lochlea at 20/-, and Mossgiel at just over 15/- an acre were not exorbitant rents, and Ellisland beginning at 10/- and rising to 14/- was a bargain. In the Ayrshire of the 1790's only rough upland grazing was going at less than 10/-; the better clay lands were fetching from 20/- to 30/-; and the best lands from that to 40/- and even higher. Some lands on the Eglinton estate and elsewhere by 1811 were actually set at over 160/- per acre. The rent William Burnes was charged at Lochlea (and perhaps at Mount Oliphant) might seem higher than the land justified, but a case could be made for landlords who looked for some return from indigent tenants whom really they had to subsidise. With the funds that Burnes had acquired at the time he took Ellisland, his father could easily have made Mount Oliphant and Lochlea paying and even profitable propositions.

While many fell by the wayside, both proprietors and tenants, by the last years of the 18th century the new farming had ousted the old. There was still much to be done, draining the land, acquiring better implements, improving the stock, perfecting the new techniques of husbandry. But the fundamentals of the revolutionary upheaval had been accomplished. Only in remoter areas were farms still unenclosed, and even there improved farming practices were becoming common. Modern leases had revised the relations between landlords and tenants; payments in kind and feudal servitudes had become unusual enough to be worth special note. Farming had become commercialised, and subsistence agriculture given way to the demands of the market.

As a result of the various improvements, the parishes of Ayrshire which beforehand were producing only enough for their own needs or even requiring to import foodstuffs, were by the end of the 18th century supplying farm produce to the growing towns of Ayrshire and exporting it to feed the increasing population throughout Clydeside. Grain, meal and potatoes; mutton, beef, veal, pork and bacon; even rabbit meat from estate warrens; dairy produce—all for the food market; with bullocks, milk cattle and other livestock for the farms of neighbouring areas.

By the end of the century there was a growing concentration on dairy farming. The new cattle were ousting all other forms of livestock from the lowland farms, as it became clearer that this was the most profitable form of enterprise on the damp, clay lands of Ayrshire, with the short growing season fitted for grass, with oats, hay and turnips for winter feed. And Dunlop cheese became the principal dairy product.

This sweet-milk cheese is sometimes said to have been brought to Dunlop near the end of the 18th century, by one Barbara Gilmour on her return from Ireland after the religious persecutions; but this area was famed for its cheese and butter a century before that. In any case, whatever its origin, the making of Dunlop cheese spread throughout the county to become in the 19th century the chief product of the Ayrshire farms. Liquid milk was sold in nearby towns, but it was impossible to transport such a perishable product for longer distances; and butter was almost as awkward a commodity; but milk could be converted into cheese daily after the milkings, stored, and transported in quantity, conveniently, by slow-moving horse and cart transport, to markets outside the local area. And the whey by-product could be used to fatten pigs.

As commercial farming became general, dairying became the rage among all classes of landholders. Even in the fictitious parish of Dalmailing, Rev. Micah Balwhidder found that his new second wife had been bitten by the craze. In the *Annals of the Parish* we read: "Then we had milk cows and the calves to bring up, and a kirning of butter and a making of cheese; in short I was almost by myself with the jangle and din. The second Mrs. Balwhidder sent her butter on the market days to Irville, and the cheese from time to time to Glasgow—and they were both so well made that our dairy was just a coining of money, and after the first year we had the whole tot of my stipend to put untouched into the bank."

And another summed up what the change from a subsistence economy to market production meant in some of its human implications: "The milk, the cheese, the cream, the butter, were reserved by the thrifty housewife from the family with jealous care, that they might be converted into cash—even the butter milk, and the whey, were sent to market, and as for a taste of the curds, this was placed under a most rigorous interdict. In vain did the younglings at times look with greedy eyes or watering mouth to the large vessel in which it was placed, or implore a little of its sweet and desirable contents—all was peremptorily prohibited—the law was absolute and

universal. The milk was carefully skimmed that the butter might be more abundant, the return in cash larger and more boastful. Even the master and the mistress of the family shared very scantily of those delicious viands with which they were daily versant . . . they starved in the midst of plenty."

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The above is part of a longer study of "The Background to Burns," which will deal with varied aspects of his environment in later 18th-century Scotland.

The most important printed sources for Ayrshire agriculture in the 18th century are Col. William Fullarton's *General View of the Agriculture of the County of Ayr*, 1793, prepared for the Board of Agriculture, and a second report with the same title, by William Aiton, 1811; and appropriate sections of Sir John Sinclair's *The Statistical Account of Scotland*, 21 vols., 1791-8. Additional information comes from Rev. J. Mitchell's *Memories of Ayrshire about 1780*, written in 1842 and published in the *Miscellany* of the Scottish History Society, 1939; George Robertson's *Topographical Description of Cunninghame*, 1820, and his *Rural Recollections*, 1829; W. Donaldson's *Account of the Southern District of Ayrshire* in the *Transactions of the Highland and Agricultural Society*, 1816; *Minutes of Improvements on Ayrshire Estates* in W. Robertson's *Historic Ayrshire*, vol. 1, 1891; John Galt's *Annals of the Parish*, 1821; and for earlier conditions three 17th-century documents—Timothy Pont's *Cunninghame Topographised*, editions of 1825, 1858, 1876; William Abercrommie's *Description of Carriat*, published in Macfarlane's *Geographical Collections* of the Scottish History Society, 1907; and the *Corshill Baron-Court Book*, in the *Archaeological and Historical Collections of Ayr and Wigton*, 1884.

For the improving lairds, see the *Scots Peerage*, Paterson's *History of Ayrshire*, Robertson's *Ayrshire: Its History and Historic Families*, and sometimes the writings of James Boswell. The passage relating to the Earl of Eglinton may be found in John Service's *The Memorables of Robin Cummell*, 1913, while Fairlie of Fairlie is discussed in J. Kelso Hunter's *Retrospect of an Artist's Life*, 1868.

Modern studies of 18th-century farming are found in H. G. Graham's *Social Life of Scotland in the 18th Century*, 1899; Henry Hamilton's *Industrial Revolution in Scotland*, 1932; and J. E. Handley's *Scottish Farming in the Eighteenth Century*, 1953. J. H. G. Lebon has two articles in the *Scottish Geographical Magazine*, 1946—*The Face of the Countryside in Central Ayrshire*

during the Eighteenth and Nineteenth Centuries and *The Process of Enclosure in the Western Lowlands*. William Aiton's *Treatise on the Dairy Breed of Cattle*, 1825, is interesting for the early history of the Ayrshire breed, a topic considered in the *Transactions of the Highland and Agricultural Society* by T. Farral (1876), A. McNeilage (1901), C. Douglas (1919), A. D. B. Smith (1937), and in the *Collections of the Ayrshire Archaeological and Natural History Society* by Hugh Bone (1950).

Burns's social background has never been adequately studied. T. F. Henderson's *The Auld Ayrshire of Burns*, 1906, is superficial, and J. O. Mitchell's *Burns and His Times*, 1897, useful only in a limited way. Of the biographies, F. B. Snyder's *Life of Robert Burns*, 1932, has been the most useful for our purpose, supplemented by many occasional references found in all sorts of corners of the mass of writing devoted to the memory of Robert Burns.