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MILTON KEYNES REVISITED: 1971

Miscellaneous Study No. 51,
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PREFACE

In 1967 this Department carried out a comprehensive survey of the agricultural population and their farms in the area that had been designated for the new city of Milton Keynes. A report of that survey was published in 1968*. It was the first of a series that would 'endeavour to examine the effects of large scale urban development on agricultural communities'.

This latest report - Milton Keynes Revisited - is the second in that series. It follows a second survey of the area that was undertaken in March, 1971. Because of the now constantly changing patterns of land use and ownership it has been felt that a detailed cataloguing of events, at a particular point of time, would be of no special significance. The report has therefore been presented in five separate parts each one of which looks at a particular facet of the development which, from the agricultural point of view, has been thought to be of interest. First, an introductory section considers some important aspects of compensation. Then three sections examine different aspects of farming in the designated area and a final section comments briefly on the subject of farming on the perimeter.

* Milton Keynes 1967. An Agricultural Inventory.
University of Reading, Department of Agricultural Economics.
September, 1968.

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The Department wishes to record its thanks to the farmers, farmers' sons and farm workers who have patiently answered our questions for a second time. We are also grateful to the officers of numerous local and national organisations, not least of the Milton Keynes Development Corporation, who have helped us in various ways.

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I. INTRODUCTION

The loss of agricultural output, which is a necessary consequence of the construction of large development projects such as motorways, new towns, airports etc., appears to many people to be one of the more important, if not the most important, costs that society must bear in order to enjoy the benefits of such projects. This belief, in itself, is probably sufficient reason for a study of the impact of the new city of Milton Keynes upon the agricultural industry of North Buckinghamshire. It is important, however, that this impact should be placed in perspective. The following figures, although some of them are broad estimates and are not always strictly comparable, may nevertheless give some idea of the relative orders of magnitude involved.

Milton Keynes is the biggest single planned urban development ever to take place in this country and is expected to have a population of 250,000 in about 25 years time. 73% (16,095 acres) of the designated area was, in 1967, agricultural land, from which a total of 225 farmers and farm workers earned their living. The capital cost of the new city is estimated (at 1969 prices) to be about £700 million. The value of agricultural capital (including land) within the designated area is probably about £6 million. By 1994, the citizens of Milton Keynes will contribute perhaps £200 million per annum (valued at today's prices) to the national income of the U.K. In 1967 the contribution of the agricultural industry within the designated area was no more than £400,000.

In 1967, the value of agricultural output produced within the designated area was about 0.005% (one twenty thousandth) of total U.K. agricultural output. This figure, small as it is, nevertheless over-estimates the probable loss of agricultural output as a result of the new city. This is because the only resources which are irretrievably lost to agricultural production are the land itself and a certain (probably major) part of buildings and fixed equipment. Many of the resources used in agricultural production within the designated area will be (some indeed already are being) used to contribute to agricultural production elsewhere.

The implication of the above comparisons is that, in any individual large planning venture, it is unlikely that the impact upon agriculture will have a significant effect upon the overall relationship between costs and benefits to society. Even in the case where society is faced simply with the choice of where to position a particular development, the pressure which often develops to avoid building on 'good' agricultural land, whatever the circumstances, may, more often than not, be misguided. Such questions as the impact of position upon the nation's transport system or the differential environmental effects of alternative locations could easily outweigh the agricultural impact. It does, of course, make good sense to avoid building on good agricultural land when this is the only difference between different locations, which will sometimes be the case.

In spite of this, there remain two reasons why the impact upon the agricultural industry of the new city of Milton Keynes assumes an importance greatly in excess of that suggested by the figures quoted above.

a) As the average material standard of living in the United Kingdom rises, increasing attention is placed upon non-material aspects of welfare. These include what is often rather loosely termed the 'environmental' effect of urban development. One of the more important elements of this is 'visual amenity' which, in the case of Milton Keynes, is strongly linked to the nature of farming practice, both within the designated area and around its perimeter. Many of the early inhabitants of Milton Keynes will never see the completed city and, for them, conditions during the transitional period assume great importance. The fear that the transitional period might produce an 'agricultural slum' within the designated area was expressed by Michael A.B. Boddington in the technical supplement on agriculture to the 'Plan for Milton Keynes'.

Of equal importance is the visual impact of the new city upon the agricultural area around its perimeter. The planners have shown that they are aware of the importance of this and in order to protect agricultural land outside the designated area, a great deal of non-

residential development will be placed along the new city's boundary. Two thirds of the boundaries are, in fact, protected by educational sites, parks and open spaces, industrial sites, waterways, railways and motorways. These natural and man-made barriers are being used in an attempt to limit interference with the rural economy of the countryside outside the limits of the new city, and to help to avoid the development of an unsightly rural fringe characteristic of many urban areas. One of the more important future functions of Reading University's research team will be to monitor the success, or otherwise, of these barriers in preserving the agricultural environment around the perimeter of the city.

b) The technique of Cost/Benefit Analysis is becoming increasingly relied upon in connection with large scale public development projects such as new towns. Its philosophy is that, if total benefits, to whomsoever they accrue, exceed total costs, upon whomsoever they fall, then, in principle, the project should be deemed worth-while. Similarly, where the decision is between different locations for a particular project, then the best siting is chosen on the basis of relative excess of costs over benefits at different locations. This, of course, leaves aside the difficult and sometimes intractable problems of the identification and evaluation of the relevant costs and benefits. It is clear from the figures given above that the costs associated with the impact upon the agricultural industry of the new city of Milton Keynes (with the possible exception of rural visual amenity) are very small in relation to the overall balance between costs and benefits. However, these costs possess in common the feature of being associated with a small number of individuals. The practice of judging the merit of a development project upon the basis of the relationship between overall costs and benefits to society as a whole breaks down if certain individuals in society are obliged, personally, to bear a disproportionate share of the costs. For example society is unlikely to tolerate a situation which results in 4,000 individuals being £1 per annum better off at the expense of one individual losing the whole of his income of, say, £2,000 per annum - although the crude cost benefit ratio to society as a whole shows an excess of benefit over cost of 100%. It is for this reason that the practice of

compensation is of great importance. If costs to individuals are correctly assessed, and compensation is paid in full, then these items of costs will be distributed throughout the community in line with general national taxation policy.

The costs that may fall on the agricultural community within the designated area can be divided into two broad categories. First, there are potentially measurable costs associated with loss of income. These may result from such things as lower earnings from agriculture due to the disruptive effect of construction work, cost of moving to another area or occupation, and the possibility of ultimate lower earnings in alternative occupation or perhaps even unemployment. It is, of course, not necessarily the case that a loss of income will occur. The displaced individual may be able to obtain alternative employment with comparable or improved income and a change of farming practice within the designated area may even increase short run profits. This possibility is discussed in Section II.

The second category of cost, which is examined in Section III, is perhaps the more important. It covers such things as the loss of a traditional place of work and living, and uncertainty about future prospects. Though these factors are virtually non-measurable, they are nevertheless real, a part of total cost to society of the development of the new city, and should receive some attempt at identification and compensation if the benefit to society of the new city is not to be confounded by the unequal incidence of its cost. A major purpose of this study is to throw light upon the extent and incidence of the costs, both material and non-material, associated with the impact upon agriculture of the new city of Milton Keynes.

II. THE CHANGING PATTERN OF FARMING

When the original survey was undertaken in the Milton Keynes Designated Area in 1967, the number of farmers who were interviewed was 90 which represented 91% of the bona fide farmers in the area. The follow-up survey in 1971 embraced 65 farmers operating in the district. There were several reasons for the diminution of numbers. The most important of these is that a substantial number of individuals had already left the area, or had left farming, either through necessity when their land was required for development or through choice as opportunity for betterment arose elsewhere. The latter, however, can hardly be termed spontaneous movement, as all farmers know that their farming activities in the Milton Keynes area will be curtailed sooner or later. In fact 23 of the original 90 farmers were found to be no longer operating there, and their reasons for moving are analysed at a later stage. On the other hand three farmers had entered the area since 1967 and were still farming. It proved impossible to contact three other farmers who had been interviewed in 1967 and who were known to be still farming in the Designated Area. Thus 71 separate farm businesses were identified in the area in March 1971 as opposed to over 90 in 1967 - a drop of some 20%.

It is less easy to be precise about changes in the acreage of land being farmed in the area. In 1967 the acreage of farmed land accounted for in the Designated Area was 14,652 acres but the 68 surveyed farmers in 1971 only accounted for 9,481 acres. The situation is, of course, constantly changing - and the precise circumstances that happened to exist at the time of our second survey have no special significance. Nevertheless it was hard to realise that over 5,000 acres had already disappeared from agricultural use as development was still at a fairly early stage. Part of the answer lies in the fact that some land was being rented from the Milton Keynes Development Corporation by farmers living outside the area, and these farmers were not interviewed. But some land that was being farmed at the time of our first visit was certainly laying idle. The Corporation policy has been, wherever possible, to maximise land use. The tendency is for land to be cropped where a harvest is thought possible, despite the risk of additional compensation, should, in the

event, development be necessary before harvest occurs. Where it is known definitely, however, that a harvest will not be possible, land is not relicensed after the previous season. Clearly there must always be an element of uncertainty which is unavoidable in these matters, but wherever there are unused resources a cost is involved and the greater the degree of certainty that can be built into the accurate forecasting of land requirements, the lower such costs will be.

Tenure

Of the total area of land which is rented by farmers, about 75% was owned by the M.K.D.C. (in 1971) and leased back to farmers usually on an annual license, although some farmers have been given assurances for longer periods. A summary of the tenurial situation at Milton Keynes is given in the table below.

Table I. Systems of tenure (March 1971)

Owned by M.K.D.C.	4,545
Owned by other landlords	1,586
Owner occupiers	<u>2,755</u>
	8,886

The implications of farming on a short-term basis are perhaps the most important considerations in examining the development of agriculture within the Designated Area. An intuitive approach would suggest that farmers in such situations are unlikely to undertake long-term investments in buildings and fixed equipment and indeed might change their policy with respect to more operational matters like fertilizer application. In addition, systems of farming might change - there might be a growth in the acreage of cereals and a reduction in the importance of those enterprises requiring higher costs, especially those costs which can only be recouped over a period of years. The following sections therefore present the evidence of the survey on:-

- Changes in farming system
- Changes in day-to-day practice
- Changes in long term investments.

Changes in farming systems

Table II gives an indication of the changes in the pattern of land use on the surveyed farms in 1967 and 1971.

Table II

Crop Acreages as a % of Total Crops and Grass in 1967 and 1971

	<u>1967</u>	<u>1971</u>
Wheat	17.1	18.7
Barley	28.5	36.4
Oats	2.7	2.9
Potatoes	0.6	0.2
Sugar Beet	0.6	0.2
Other	<u>1.3</u>	<u>2.5</u>
	50.2	60.7
Temporary grass	13.6	6.9
Permanent grass	<u>36.2</u>	<u>32.4</u>
	100.0	100.0

The main feature reflected in Table II is that there has been a relative growth in the importance of cereal crops, particularly barley, at the expense of the grass acreage, especially temporary grass. This has happened during a period when the barley acreage overall has tended to decline in this country although the wheat acreage has increased. More cannot be said however without examining changes in the livestock population in the area, particularly the grass-using enterprises.

Table III

Grazing Livestock per 100 acres and Other Livestock per farm

<u>Grazing livestock per 100 acres</u>	<u>1967</u>	<u>1971</u>
Dairy cows	7.9	2.9
Dairy followers	5.2	4.8
Beef cattle	17.7	19.9
Ewes	31.0	31.2
<u>Other livestock per farm</u>		
Pigs	21.9	39.0
Poultry	1,156	358

Clearly one of the major changes in farm systems in the area has been the diminishing number of dairy cows. The reasons for this may be the reluctance of farmers to make new investments in dairy plant and machinery - one farmer confronted with the choice of improving his milking arrangements or going out of dairying altogether, spoke for many when he indicated that such long term investments could not be justified.

There is additionally the capital tied up in the cows themselves to consider. The need for mobility and to be able to respond quickly to an emerging opportunity has been recognised by the farming community and this implies having as many resources as possible in a relatively liquid form. There is at present an unusually high proportion of followers to dairy cows which are residual aspects of the enterprise. Farmers with young dairy stock have sold the herd and are keeping on the heifers to sell at a later stage in their maturity. Other grazing livestock animals have neither increased nor diminished in importance in the farm systems and are the principal users of the permanent grass land which has only altered slightly.

It is difficult to draw significant conclusions from changes in the importance of other types of livestock for whilst the importance of pigs has substantially increased, there has been a diminution in the number of poultry. The major part of the latter can, however, be explained by the closing down of one substantial poultry enterprise which was operating in 1967.

The most important change in farming systems has then been a decline in the importance of ley farming and a growth in the cereals acreage. This is broadly the pattern that would be expected in a situation where long term soil fertility was not an important factor. 40% of the farmers interviewed indicated in fact that they thought an arable system was the type of farming most appropriate to their new uncertain circumstances, although 14% had adopted an opposite view and were converting their farms to all-stock systems.

The most important implication of changes in farming systems which have taken place is the effect on the profitability of farming

in the area. The reduction in the amount of dairy farming in the area has meant certainly a concentration of activity on enterprises with a lower gross margin (the average gross margin from dairying in the counties covered by the Reading University Agricultural Economics & Management Department was £52.60 in 1971 whilst that from wheat was £36.50 and barley £30.00). This may not in itself be a telling point if farmers who have made this kind of change have also been able to reduce the level of their fixed costs. So far as labour is concerned, if in no other respect, there is evidence to suggest that this has been the case.

Changes in day-to-day practice

There is little evidence from the survey that farmers in the area have changed the nature of their day-to-day farming activities. Fertilizer applications, pest and weed control programmes and livestock husbandry show no significant changes compared with 1967. Neither is there likely to be an overall and catastrophic deterioration in the quality of the existing fixed equipment. 31% of the farmers interviewed indicated that they would do the minimum necessary building maintenance; a further 22% said that their policy in this respect would be as normal, (which presumably would involve some element of expenditure) whilst only 25% suggested that their expenditure on building maintenance would be cut out entirely.

A further factor which is affecting farming practice is the diminution in the size of the agricultural labour force, which has fallen by about 30%. It is difficult to distinguish cause from effect and to decide whether changes in farm systems have diminished the demand for labour or whether departing labour has forced a change in farm systems. The true answer probably involves a degree of both. Only 12% of the farmers actually admitted that they now had greater difficulty in recruiting labour due to the new employment opportunities which existed in the area. This is not an area with a large hired farm population (there were only 79 workers in 1967 and 37 in 1971). The diminution in the amount of farm labour employed is clearly, however, an important characteristic of agricultural change in such situations,

whether the original impetus comes from farm workers wishing to leave or farmers wishing to change to farm systems which can be more easily and quickly wound up.

Changes in long term investment

As one would expect, little investment is taking place within the Designated Area in fixed equipment or buildings and approximately 95% of farmers indicated that they would make no more such investments. This, of course, is inevitable and desirable in so far as it will help towards reducing farmers' fixed costs - either in the form of rents or interest charges. Whilst in theory this should help to compensate them to some extent for the extra establishment costs if they successfully commence to farm elsewhere, in practice the longer that they have to continue to operate in a situation where their fixed investment is zero, the more circumscribed will their possible activities be, and the lower is likely to be the profitability of the existing system. Thus deterioration in the structure of a cowshed may face the farmer with the unattractive alternatives of an investment that he cannot hope to recover or the relinquishment of a profitable and long-established enterprise.

Investment in machinery and tenant fixtures has also been affected, reflecting perhaps the uncertainty in many farmers' minds whether or not they will be able to continue farming when they have to leave their present holdings. The average valuation of machinery has fallen by approximately £600 per farm, which allowing for inflation represents a substantial fall. Allowing for the fall in livestock numbers and the increase in cereals it will be appreciated that a diminishing amount of tenant capital per acre is now being employed in the area - a trend that could well continue as urbanisation proceeds.

III. ATTITUDES AND PLANS

In the Introduction to this report attention was drawn to the costs that are created for some individuals, especially amongst the rural community, when decisions are taken to develop new urban areas. Whatever the long-term balance is between the costs and the benefits to those individuals, it is fairly certain that the short term will be characterised more by cost than by benefit. This is so for two reasons: first, simply because, in the nature of things, it is the costs rather than any benefits which tend to occur in the short period, the full impact of which is therefore felt there and then, with little or no relief from the discounting of future transactions; secondly, because some of these early costs, are unlikely, if only because of the difficulty of identifying them, to be fully compensated by the community. This is especially true of items which lie less in the realms of clearly definable costs of disturbance or financial loss, and more in the realms of uncertainty of knowledge, an inability to make plans and the various forms of personal anguish that may stem from these things. Nevertheless, costs of this kind are as real to those who experience them as are the items on which monetary values can more easily be placed. The purpose of this section, therefore, is to describe something of the attitudes and plans of individuals who have experienced such costs, and how these attitudes and plans have changed in response to changes in the circumstances which originally gave rise to them.

In order to appreciate these changes it is necessary to recall something of the mood in the area when this department conducted its first survey early in 1967. It must be stressed that at that time the Milton Keynes Development Corporation had not come into effective existence. The farm population in the locality had already been living "with rumour and counter-rumour through nearly a decade". It had proved difficult, when interviewing these people, to ask precise questions that were equally relevant to a group who shared a common bond of uncertainty, but whose individual domestic and professional circumstances were widely diverse. Nevertheless through questioning and through informal discussion three dominant impressions emerged and were reported by us in detail at the time.¹

1. Milton Keynes, 1967. An Agricultural Inventory. Dept. of Agric. Economics, University of Reading, pages 30-32.

To summarise, it was clear, first, that the majority of farmers (70%) wished to go on farming, and that some half of these hoped to do so either in the 'same general locality' or on part of their existing farms. The other half either had not decided or did not, at the time, seem to care where they might go.

Secondly, the total uncertainty of the situation - where and when development might start, how and in what measure compensation might be paid - rendered most people incapable of thinking at all precisely about when or where or how they would seek alternative dwellings and employment. Lack of information nullified any attempt to plan and it was this, perhaps more than anything else, which created most of the resentment and tension that was clearly felt at the time.

Thirdly, it seemed clear that the farming community was in real danger of losing its professional sense of purpose. Investment in fixed equipment in the area had begun to fall off some years earlier and farmers envisaged a move towards more extensive arable methods of farming. 'Farming in a vacuum' and 'farming to no end' were the kind of sentiments frequently voiced.

We concluded in 'the inventory' that 'such uncertainties constitute social costs to the communities disturbed.... and that it should be a major objective of any such operation so to conduct the public relations aspect of the work as to minimise these costs (a task in which) planners, administrators, advisers and trade union officials will all be involved'.

This then was the situation that existed in 1967, at which time the mounting costs of uncertainty had probably reached or almost reached their peak. During the next four years which separated this Department's first survey (of 1967) and its first follow-up survey (in 1971) many changes occurred. In 1967 the Development Corporation itself was appointed and began its work; in the same year the South East Economic Planning Council recommended (in 'A Strategy for the South East') that the plans for Milton Keynes should be implemented as rapidly as possible. At the close of 1968 the appointed planning consultants¹

1. Llewelyn-Davis Weeks Forestier - Walker and Bor.

submitted their Interim Report to the Development Corporation. This was followed, a little over a year later (in 1970) by The Plan for Milton Keynes - 'a strategic framework in which the city can be developed' - a city which featured in the same year, in yet another 'Strategic Plan for the South East'.¹

These were some of the milestones and events which marked the development of the basic concepts underlying the plans for the new city and its place in the wider context of South East England. Gradually, strategic plans have given way to the first visible signs of a city. Roads, houses, schools and factories are now all being created as part of a detailed seven year plan that will take the population beyond 100,000; and the proposed implementation of this plan has indicated the approximate time-table for the uptake of agricultural land.

From the farming community's point of view the general effect of these developments seems to have been one of considerable relief. The gradual increase in the supply of relatively firm information about the future has meant that a growing number of individuals have been able to seek (or begin to seek) their own salvation. Faced with reality rather than rumour, feelings of resignation and acceptance have to a large extent replaced the utter frustration of four or five years ago. The combined effect of changing circumstances and the mere passing of time has changed many personal attitudes and intentions. The extent of these changes (or lack of them) can perhaps best be illustrated by re-examining those three feelings which characterised the farming community's reaction in 1967 i.e. 'a desire to go on farming - preferably in the same general area', 'uncertainty' and 'the loss of any sense of professional purpose'.

The desire to go on farming - preferably in the same general area

When asked (in 1967) whether or not they hoped to go on farming (and if so where) the 90 farmers interviewed at that time replied as follows:-

1. Prepared by the South East Joint Planning Team.

Yes :	63	→	On part of this farm	11
			Elsewhere	52
				—
				63
		↓	In this locality	22
			In the Midlands	2
			In the South	4
			Anywhere	13
			Don't know	11
				—
				52
No :	16			
Undecided	11	—		
	90			

In 1971 the position in respect to these people was as follows:-

Excluding the 11 who hoped to continue operating on part of their existing farms (and who would probably not need to move) 12 (of the remaining 52) originally felt that they would move 'at the earliest possible moment', 17 of them 'in due course' and 23 when 'development of their farm was imminent'. Of the 12 who thought they would move at the earliest possible moment, five have in fact gone, and are now farming in localities consistent with their earlier stated intentions; the other seven were still at Milton Keynes in 1971. Of the 17 who would go 'in due course', five had done so by 1971, and 12 remain. Of the 23 who would go when development of their farms becomes imminent, three have gone (one of them, only, because development was in fact imminent) and 19 remain.

Of 16 farmers who in 1967 said they did not intend to remain in farming, none has moved to another occupation. Five have retired, two have died and nine remain in the area as farmers.

Of 11, who in 1967 were undecided about their futures, five were still farming at Milton Keynes in 1971; five have gone into other employment and one has retired.

The general impression from this analysis is that, in the short term at least, there is a fairly strong tendency for people to stay put all the time they can. Amongst those who are keen to stay in farming the propensity to 'hang on' is naturally strongest amongst

those who, originally, felt less anxious to get away. But even so about half of those who hoped to move at the earliest possible moment, and about half of those who originally wanted to get out of farming are still, four years later, where they were. The discussion of 'uncertainty' will show that the existance of an Implementation Policy will have strengthened this general resolve to 'hang on'.

Nevertheless 23 farmers did leave the area during this four year span, and their exodus occurred in approximately equal numbers over the four years 1967 to 1971. Seven of this 23 have retired, three have died, eight are now farming elsewhere, three are in non-farm jobs, and two could not be traced.

In these still early days, it has been mainly the tenant farmers who have left, usually compensated in the normal way by their landlords who were then free to sell with vacant possession to the Corporation. At this stage, direct dealings between tenant farmers and the Corporation had been minimal and only two of the 23 moved as a result of a compulsory purchase order. Of the three who moved out of farming, one has become a grocer, one a representative and one a crane operator in a railway repair depot. With one clear exception, the eight who are now farming elsewhere felt that the financial potential from their new farm was at least equal to, and in half of the cases, was better than, that of the farm they had vacated. They were agreed, however, (again with one exception) that it would take fully several years - some estimated as many as five years - before these potentials were realised. Generally speaking the changes in such matters as housing, educational and employment opportunities for families and 'life generally' had been favourable rather than unfavourable. Five of the eight have remained in Bucks. Six of the eight felt that their existing managerial skills were sufficient to enable them to operate their new farms effectively.

It is finally of interest to note here that the 23 who have left comprised 17 who in 1967 said they hoped to remain in farming and six who said that they did not; of those six, four have retired and two have died. Of the 17 wanting to remain in farming, eight in fact have done so and three only are known not to have done so. Retirement (seven), death (three) and lack of information (two) account for the others.

Uncertainty

The detrimental effects of prolonged uncertainty prior to 1967 have been noted - and it became one of the prime tasks of the Milton Keynes Development Corporation, when it came into being, to try to counter this situation. All kinds of information media have been used - and have been aimed at the whole community, not just the agricultural one.

Inevitably, however, farmers will always be amongst the most vulnerable and therefore the most sensitive in developments of this kind. In any circumstances the area of compulsory purchase orders is an emotive one, but this is doubly so where agricultural land so acquired can subsequently be re-let as temporary farm land. As many local farmers admitted, the task of officials, in this kind of situation, can be an unenviable one, frequently complicated by changes in events quite beyond the control of those directly concerned with land acquisition. In a situation that has this particular mixture of ingredients occasional mistakes are inevitable. In the course of the initial phase of this particular operation lessons were learned which should be important in other, similar, circumstances. In particular it is vital that, at the earliest possible moment in development, no stone should be left unturned in an endeavour to provide reliable information (or officially to counter unfounded rumours), to create and maintain good public relations and to engender an atmosphere of mutual trust that can survive the more painful aspects of this kind of operation which are bound to arise.

This last sentence should not be read as implying any special criticism of the M.K.D.C., since many of the problems referred to had, of course, emerged before the Corporation had commenced its activities. Apart from the general publicity that has been directed to the community at large, these activities have included special efforts to keep the farming community informed, including the circulation of an "Agricultural Newsletter". At about the time of the 1971 survey all farmers in the area had been circulated in order to ascertain their demand for additional land should it become available. At this time just under a half of those still farming in the area were doing so on unchanged

acreage, whilst nearly a third were operating on increased acreages, and nearly another third on reduced acreages. Incidentally, the re-licensing of land has not necessarily always meant a falling off in husbandry; in some cases it has been to the contrary.

Remembering that the principle object of this development is to create a city (not to preserve an agriculture) and that the situation is an inherently changing one, evidence suggests that the Corporation has been as successful in its public relations exercise as might be expected. Two-thirds of the area's 65 farmers, for instance, replied 'yes' to the question 'Do you feel that the Development Corporation is keeping you reasonably informed of progress and developments?' Those replying 'no' felt, mostly, that information could be supplied more frequently. Some two-thirds also replied 'yes' to the question - 'Are you aware in broad terms of the compensation you will be entitled to?' Again, the remainder appeared not to be - and it should not be thought that those replying 'yes' liked the terms: they simply were aware of them! This is a matter, of course, in which the Development Corporation is entirely bound by statute, and this is understood by the farming community generally.

Interestingly, despite the general pattern of replies to these questions hardly any farmers (at the time) confessed to having any knowledge of longer term plans 'to phase out agriculture and phase in urban development'. One farmer only mentioned the Wibberley/Boddington plan. This plan is contained in the Technical Supplement on Agriculture to 'The Plan for Milton Keynes'. In practice the unordered comings and goings of individual farmers (and the changing needs of planners) may well militate against some of the neat solutions suggested in the supplement. Nevertheless its underlying philosophy is important and it would be interesting to know, now, how many of the farmers still in the area are acquainted with it. Successful communications of course, is a two-way matter. It depends as much on recipients and their representatives as on the 'informers' and theirs. It could well be the case, for instance, that all but the more politically involved farmers in the area wish only to know enough of pending events to indicate what their own position is. The wider programme may not concern them, and a reaction of this kind

would not be unusual. Seventy per cent of them, for instance, know more or less precisely for how long they will be able to go on farming in the area. For some of them it will be a year or two; for others up to ten years; and over two-thirds of that 70% intend (so they said) to go on farming in the area for as long as they are allowed. Only 12 of the whole 65 still farming in the area reckon that they will subsequently be looking for farms elsewhere. Assuming that all 12 do in fact do this, then adding them to the eight who have already done so, means that a maximum of only 20 out of the original 90 farming in the area in 1967 will in fact have transferred to other farms. In a study which has disclosed the extent to which the attitudes and plans of individuals can change over time and with changing circumstances, this is perhaps one of the most significant findings of all. Retirement will eventually provide the answer for many who remain.

Sense of Professional Purpose

Writing of the situation in 1967 we had noted that 'fixed investment began to fall off in the area nearly a decade ago - and that farming morale was undermined by a sense of professional frustration and lack of information'. This was a state of affairs that had built up during the tortuously long drawn out sequence of events which led up to the appointment of a Development Corporation and the subsequent appearance of a development plan. Only at that stage did most individuals feel in a position to make either the positive decision to move away or the equally positive one to settle down to farm, in some modified way, for as long as they will be allowed or wish to do. The Corporation's Implementation Strategy, giving a 'life expectation' to each farm was a very important factor here.

The combined effect of many separate decisions about individual farms has been analysed in Section II. An increase in barley at the expense of temporary grass, a dramatic reduction in cow numbers and a release of labour were the main feature of this analysis. The statistics in fact reflect the individual attitudes that were expressed, i.e. that there would be no more investment in fixed equipment (97%) and

the maintenance of existing buildings would be carefully curtailed, if not eliminated; that 'more arable' is the type of farming that is most compatible with the 'phasing in' of urban development although a few suggested 'livestock only' as an alternative, and that there had been no special difficulties about recruiting labour.

Thus with some of the uncertainties removed farmers generally speaking, do appear to have come to terms with their individual situations. The fact that an agricultural advisor operating with a brief to advise on the special problem of farming in the area has had relatively few requests for help, suggests also that farmers have made their own decisions about the most appropriate business tactics. By no stretch of the imagination, however, should it be thought that they therefore approve of events. They are no more enamoured with the whole concept of Milton Keynes now than they were four or five years ago. They have merely become resigned to it and so far as their farm businesses are concerned are 'making the best of a bad job'. To their credit, bitterness, even in the early days, was seldom an emotion they expressed. Frustration there has been in plenty. Now, a large part of that has disappeared. It has been replaced by a resignation and acceptance of the inevitable. Farming has adjusted accordingly.

Events that have created uncertainty at Milton Keynes will no doubt be repeated elsewhere in the country as regional population pressures create further changes in land-use. When this happens, it is hoped that this continuing study will have helped to make clear when in the time scale of events those costs which are the least likely to be compensated are most likely to occur - and how, therefore, a major effort to minimise such costs might be directed.

IV. FARMERS' SONS AND FARM WORKERS

Farmers' Sons

Our 1967 survey included interviews with thirty farmers' sons who were working either as wage earners or partners on their fathers' farms. From these interviews it appeared that this relatively small group within the agricultural community might have greater difficulty than other groups in adjusting to the changes which would result from the Milton Keynes development. A certain degree of bewilderment and lack of definite plans was evident in many cases, and very few had any experience beyond that gained on their father's farm.

In 1967 nearly half of the 18 sons who were wage earners (as opposed to being partners) anticipated moving out of farming altogether, and all but one of the others intended to seek a farming occupation away from the Milton Keynes locality when they eventually had to move. By 1971, 13 of the 18 had either given up farm work or had moved out of the area. Five, who had changed to non-agricultural work, all found new jobs in or near the Milton Keynes Designated Area; two in fact continued to live with their parents, who had not moved by that time. Only one of the five had undergone any form of re-training (for a clerical job), the others had become a factory foreman, a landscape gardener and workers for non-agricultural contractors. None of the five expressed any desire to return to agricultural work in the future. Of the eight sons who had moved to agricultural jobs outside the Designated Area, three moved with their parents to other farms, three had bought their own holdings and two had become employees on farms outside the area. It is interesting to note that six sons who had ceased to work on their fathers' farms, including four of those who left farming altogether, did so for reasons not directly connected with the Milton Keynes development; four of them had done so because income from the farm had been inadequate to support them as well as other members of the family. Only two of the 13 sons said that the changes they made had been disadvantageous in any respect. On balance it appears that, for the people involved, the advantages of the changes have outweighed their disadvantages and that they have been made with relatively little difficulty or cost.

The remaining five of the 18 wage earning sons interviewed in 1967 consisted of one who was away at an agricultural college in 1971, one who was still a worker on his parents' farm, and three who had taken over their fathers' farms and were tenants under 14 day licence from the Milton Keynes Development Corporation. The one who was still a worker wished to stay in the area for social reasons and was prepared eventually to take non-agricultural work in order to do so. The three who were farming as tenants all planned to stay in their present farms as long as possible and to find other farms outside the area when they had to move.

The 11 sons who were partners with their fathers in 1967 proved, for various reasons, to be a more stable element than the wage earners; only two had left the area by 1971. This is hardly surprising in view of their greater involvement with the farm than is the case with wage earning sons. Both the sons who had left did so before their farms were actually required for development, but because this was imminent. One had succeeded in finding another farm but the other had decided to give up full-time farming and take a job in an ancillary industry.

Four of the nine partners who remained in the area were unlikely to be seriously affected by the development because a substantial part of their farms is situated outside the Designated Area. One, however, was having to move house. The other five knew with varying degrees of precision how long they would be allowed to remain in their farms and most of them said they would stay as long as possible. Only one had definite plans for his future when the time came to move, but for three this would not be for six to ten years.

In the relatively short space of four years the volume of uncertainty and disturbance faced by 30 people has been reduced by at least half, in that 15 of them have weathered the initial effects of making a change. For the majority of them the change appears to have been much less traumatic than they feared beforehand and for some it would have taken place in any case. The burden of uncertainty on those who are still farming in the Designated Area appears to be rather less than it was in 1967 although it still remains, particularly for five of the 'partners' and for the three sons who have taken over their

fathers' farms but who now have little or no security of tenure. Those who continue to farm in the area until the progress of development forces them to move will undoubtedly be faced with many problems and frustrations associated with farming in an increasingly urban environment.

Farm Workers

The position of farm workers has from the outset seemed entirely different from that of farmers and farmers sons. It has been uncomplicated by the need to redeploy commercial capital and, in many cases, less complicated because of a greater potential mobility into other jobs than is often felt to be the case with farmers. This is not to say that individual cases of hardship will not or have not occurred depending on such factors as how an individual's age, alternative skills, housing arrangements etc. affect his mobility. Bearing in mind, however, the long time-period over which development will proceed and the jobs (even of an agricultural nature) that could be created by a new town, it was suggested in our 1967 survey that 'there will be no major problems in the re-employment of farm workers'.

At that time 79 farm workers had been interviewed out of a total of about 100 estimated to be employed in the designated area; and 80% of those interviewed hoped to remain in agriculture. Four years later ^{*} 47 of the 79 had departed. It has not been possible to trace them all, but so far as can be told only six of them have definitely remained in agriculture. Others had become lorry drivers, labourers, factory hands, gardeners, mechanics etc. Two had retired and two had died. Eight of the 47 moved because their employer was selling up or retiring, and another eight were motivated by the general insecurity of the situation. The remainder (31) moved for reasons apparently unconnected with the prospect of urban development. From those actually interviewed there was little or no evidence to suggest that their move has been at all disadvantageous.

Of the 27 hired workers still in the area in 1971, only three were stockmen and 16 were general farm workers. Six of the remainder were farm managers. Nineteen of them still plan to remain in agriculture

* A further five could not be traced.

while they can, but only nine of these feel committed to agriculture for the rest of their working lives. These nine, plus (presumably) some, if not all, of the six who have already gone to other farms are all of the original 79 who seem determined to remain on the land indefinitely. This accounts for 20% of the original total. It is of interest in this respect that not widely different proportions of farmers and farm workers (70% and 80% respectively) felt, in 1967, that they would like to remain in farming for as long as they could. In the event, allowing for retirement, many more farmers will have done so than farm workers illustrating perhaps something of the difference in occupational mobility that exists between the two groups.

It is of further interest in this respect that whilst only three 'new' farmers had entered the area between 1967 and 1971 - and each one of them already had some kind of connection in the area - ten 'new' farm workers had done so. Mainly tractor drivers or general farm workers, their reasons for taking employment in the area were varied but in no case had they been deterred or concerned by the prospect of employment for a strictly limited period of time. The ease with which their predecessors have found alternative employment - heavy national unemployment notwithstanding - no doubt justifies their confidence.

V. AGRICULTURE ON THE PERIMETER

At this stage it is impossible to say with any certainty what change, if any, may occur within the agriculture which, in due course, finds itself immediately surrounding a new city. Certain possibilities, however, seem likely. Over time, for instance, the scale and pattern of investment in farming in the countryside surrounding the developing city may well undergo some changes in consequence of the proximity of an expanding urban population. Whilst some farm activities are less easy to carry on adjacent to town conditions there are others that may be stimulated by the demand for local produce. Moreover, the pattern could be influenced by changes in the supply of labour. The size of the agricultural labour force and the level of agricultural wages in the area will no doubt be determined by an interplay between farmers' responses to the new conditions on the one hand, and the counter-attractions of industrial and commercial employment on the other. The level and direction of farm investment and hence the productivity of farming could thus be the outcome of many interacting forces. Some longer term investment decisions may also take into account the possibility of the land for still further urban development. This potential could result in ownership having only a short-term interest in the farming prospects and in turn this could well be reflected in the kind of investment and the agricultural output of the area.

It is one of the aims of this Department to measure such changes as might occur over a period of time and this can be accomplished in a number of different ways. Many of these changes would be recorded by the Agricultural Census which is published each year as a series of aggregates for each parish. These statistics permit comparisons to be made between parishes adjacent to the Milton Keynes development and more distant ones, over a considerable period of time. Thus we have data relating to the period prior to the announcement of the plans to designate a new town from which to judge the pace of events before the project was mooted. The census will also provide objective data throughout the development.

The intention is to study an area comprising some 260 parishes extending northward from Aylesbury to Northampton, and eastward from Daventry and Bicester to include the town of Bedford and much of Luton. The town of Buckingham is sited within this area, also.

It is clear that the urban development extending from all these towns will exert pressures on the adjacent farming industry, and that the trends observed in their localities will be of value in assessing any changes taking place in the immediate vicinity of the Milton Keynes project. While the majority of the parishes in the study area, might be expected to retain an essentially rural character in the foreseeable future there must be little doubt that the new growth will undoubtedly influence the aspirations of those living and working there and add new dimensions to the planning and organisation of the farm businesses that operate within their boundaries. Data will be sought from official sources about applications for grants for farm improvements. If the statistics were made available in the form of parish aggregates there would be no invasion of confidential information involved in this study which is concerned with plotting the geographical distribution of these investments and the relative rates at which they take place.

Finally, we are hopeful that the statistics from official sources can be supplemented from time to time by interviewing farmers and others in areas of special interest. Indeed this may often be the only way of making an interpretation of the trends revealed by the aggregate figures.

