LABOUR SHARING IN AGRICULTURE

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FOREWORD

The 'lumpiness' of labour as a resource is a familiar problem to agricultural economists. Farm labour comes in units of whole man years when often what is required is one-and-a-half men or three-quarters of a man. Despite trends towards casualisation, feminisation and increasing reliance on agricultural contractors, more than four-fifths of the man days worked on British farms are contributed by full time farmers and full time permanent employees. The cost price squeeze and, in particular, rising costs of labour, are focusing attention on the efficiency with which labour is being used. The drastic reduction in the farm labour force since the Second World War has not helped farmers to match labour supply to demand. It has left some large farms seriously undermanned, many smaller farmers without regular help and half of the holdings employing labour with only one full time worker. At the same time, the cycle of family development gives rise to periodic surpluses and shortages of labour on small farms.

This report explores the possibility of farmers joining forces to solve some of their labour problems. There might be scope for dairy farmers to employ relief milkers on a group basis, for example, or for arable farmers to pool labour in conjunction with shared machinery. In this study Ruth Gasson draws material from a number of sources to build up a case for labour sharing arrangements in British agriculture. Sources range from agricultural statistics through sociological literature on group dynamics to experiences of practical working farmers in Britain and elsewhere who have made a success of group activities.

This research was sponsored and financed by the Central Council for Agricultural and Horticultural Cooperation, the Agricultural Training Board and the National Farmers' Union Development Trust, each of which has an interest in the scope for labour sharing activities in agriculture. But the form of the study and its findings are the responsibility of the author alone.

Gerald Wibberley,
Chairman, 1978/9,
School of Rural Economics
and Related Studies,
Wye College,
University of London.
ACKNOWLEDGEMENTS

This project had its origins in a letter to universities from the Central Council for Agricultural and Horticultural Cooperation dated October 1975, setting out its policy towards research. The Central Council indicated a number of topics but was particularly anxious to encourage research into 'the scope for cooperative activity in UK agriculture.' Other pointers suggested that time was ripe for a study of labour sharing in agriculture. In its report assessing the availability of labour for agricultural expansion, the Manpower Working Group of the Agriculture EDC recommended that the potential for cooperation in labour use be investigated. At a meeting of the British Society for Agricultural Labour Science, Brian Shorney of ADAS gave a stimulating talk on relief labour cooperatives in the Netherlands. The Agricultural Training Board also indicated an interest. Choice of labour sharing as a research topic brought together my own interests in cooperation and the farm labour force.

Most people carrying out a research project draw on the knowledge and goodwill of others. In the present case my debt seems unusually large. Finance for the study came from the Central Council for Agricultural and Horticultural Cooperation, the Agricultural Training Board and the National Farmers' Union Development Trust, whose support is gratefully acknowledged. In particular I should like to thank John Morley of the Central Council and Peter Allen of the Agricultural Training Board for their help and advice at all stages of the project.

Since this was an exploratory study, I gathered ideas rather than facts and for this I consulted many experts. Advisers specialising in cooperation, farm management, agricultural training, dairying, farm mechanisation and socio-economics gave their time and assistance generously. Ken Leggett, then Regional Cooperation Officer for eastern England, was especially helpful in providing contacts with cooperatives and groups in East Anglia. Two small surveys were carried out in the course of the project. I am indebted to Michael Thompson, formerly of the Agricultural Economics Unit, Cambridge University and to the
British Sugar Corporation for allowing me to include questions about cooperation in their 1976 sugar beet survey. The study of agricultural training groups proved very rewarding. Of all those who helped, including training advisers, group chairmen, training officers and organisers, I should most like to thank Wally Clark of Bourne House and Richard Simpson, ex-Regional Training Adviser for Wales.

Colleagues and friends with an interest in agricultural cooperation contributed in many ways. A meeting with Gwyn Jones at Reading University guided me towards group dynamics. I have learned much about the dynamics of farmers' groups from David Pickard, Professor of Marketing at Wye College. Robert Dick of Glenteviot Farmers, David Powell of A.I. Farmers and Alan Burston of Writtle Agricultural College are among those who helped by making encouraging and constructive comments on earlier working papers.

During 1978 I was attached to the Kellogg Rural Adjustment Unit at the University of New England in Armidale, New South Wales. My visit coincided with preparation of a guidebook on group farming and I was fortunate to be invited to collaborate on the project. It provided valuable insight into the working of farmers' groups in Australia and the present report builds on that experience. I am grateful to the Kellogg Unit for making it possible, to Roy Powell its Deputy Director who coordinated the project and above all to my colleague Malcolm Bartholomaeus for his kind and generous help and fund of ideas.

The School of Rural Economics and Related Studies, Wye College, kindly provided a base from which this work could be completed. I should like to thank the School for agreeing to publish this report and especially Gerald Wibberley, its Head, for his valuable advice and encouragement. I must point out, however, that the views expressed here are mine and that I remain responsible for any errors in the report.

Ruth Gasson
April 1979.
1. THE NATURE OF THE PROBLEM

1.1 Current manpower situation

One of the major preoccupations for British agriculture since the end of the Second World War has been 'the drift from the land.' In 1950 there were some 740,000 people employed on farms in England and Wales, by 1969 only 350,000 so in two decades the hired labour force had been reduced by more than half. Outflow of manpower from the industry was particularly rapid during the 1960s, losses of permanent male workers especially giving rise to concern. By the late 1960s policy makers were beginning to ask whether numbers of workers remaining on farms in the 1970s and 1980s would be sufficient to meet the output targets set in the 1965 National Plan (see for example Agriculture EDC, 1968 and 1969; Bessell, 1972; Power and Harris, 1973).

Ten years later, this fear has on the whole been allayed. 'The drift from the land' has slowed down considerably, the total labour force contracting at a rate of only two per cent per annum during the 1970s compared with about four per cent during the 1970s. Undoubtedly high levels of unemployment have been a major contributor. It is now considered unlikely that labour shortages will prevent the industry achieving its output objectives for the 1980s.

In the White Paper Food from Our Own Resources (Cmnd. 6020) the Government set the industry a target of an annual 2.5 per cent increase in net product. The Economic Development Committee for Agriculture formed Working Groups to examine the feasibility of this growth rate and its implications for various sectors. Assessing availability of manpower resources for the 1980s, the Manpower Working

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1. Throughout this paper the term 'agriculture' is intended to include horticulture and 'farmer' to include grower.
Group expected *supplies* of labour in agriculture to be no more and possibly less constrained than in the past. Besides the narrowing of the earnings differential between agriculture and other industries, levels of unemployment were expected to remain above the average for the past decade while the supply of labour for the economy as a whole would be likely to rise. On balance, factors 'pulling' labour out of agriculture were expected to be somewhat less powerful than in the past. Despite this easing of supply, the Working Group did not anticipate any major change in the downward trend of demand for labour in agriculture. Although employers might be able to draw on a wider pool of experienced labour than in the past, it was thought unlikely that they would employ more workers in aggregate. In other words, factors 'pushing' workers out of agriculture would continue to exert the same pressure as before.

The Working Group concluded that, if necessary improvements could be made in manpower quality, labour resources of British agriculture would be adequate to cope with demands of the 1980s at industry level. This is not to say that no problems were anticipated. The Working Group recognised that local labour shortages might arise due to demands of particular types of farming, levels and types of industrial activity in a locality or declining population and deteriorating services in more remote rural areas (Agriculture EDC, 1977).

The burning question is no longer how to keep labour on the farm but how to make more effective use of scarce manpower resources remaining in agriculture. Farmers everywhere are caught in a cost price squeeze which focuses their attention on the efficiency with which resources are being used. Since costs of employing labour have been rising faster than costs of non-labour inputs, pressure to economise in labour use has been particularly intense. There is no reason to suppose this pressure will slacken during the next decade.
Making workers redundant and not replacing those who leave, substituting capital in the form of machinery, equipment and buildings for labour, increasing the area farmed without taking on more workers, adopting labour saving techniques like minimal cultivations and neglecting less essential maintenance tasks, are some of the means by which farmers have economised in labour use.

Another approach, perhaps the other side of the same coin, is for farmers to improve the quality of labour that remains on the farm. The Working Group placed considerable emphasis on this aspect. Workers remaining in agriculture in the 1980s must be capable of adapting to rapid technological change and assuming responsibility for increasing amounts of capital. Improvements in agricultural education, more widespread training to craft level, greater training and education for management, especially man management, are means to this end. More rigorous selection of workers and care in fitting the man to the job are also ways to improve labour productivity.

A third way of increasing the effectiveness of labour use is to improve the goodness of fit between labour supply and demand. If labour supply is surplus to requirements, costs will be high and productivity correspondingly reduced. If labour resources are insufficient to meet demands placed upon them, output may be lost, work badly done and excessive strain imposed upon the labour force. Either way, labour productivity will suffer. As the Productivity Steering Group of the Agriculture EDC found, having labour surplus to requirements was one of the two factors negatively associated with farm productivity, the other being age of farmer. This finding was more striking in view of the large number of factors showing no apparent relationship with productivity. While temporary imbalances are inevitable, given the nature of farming, and probably acceptable in the short run, their persistence will undermine the profitability and long run viability of a farm business. The Productivity Steering Group felt that labour utilisation was one area where an improvement in productivity could be achieved (Agriculture EDC, 1973).
1.2 Scope of the study

This paper focuses on problems of matching labour supply to demand at the individual farm level. In the economist's jargon the issue is one of 'overcoming the lumpiness of the labour input.' The exercise could equally be described as 'increasing the flexibility of labour use.' Solutions involving group action appear to be the most promising, so the project has become an exploration of the scope for cooperation between farmers in labour use. The terms 'cooperation,' 'group action,' 'sharing,' 'joint action' and 'multi-farm use' are used interchangeably. 'Multi-farm use of labour' is intended to cover all ways of employing farm labour resources such that costs may be reduced by using labour on more than one farm.

The object of this study is to open a debate on the subject of cooperation in labour use rather than providing definitive answers. It is intended for farm advisers, innovative farmers and any others who are in a position to introduce ideas and influence opinion in the industry. Its approach is threefold:

- collecting together relevant information on the scope for cooperation between farmers in the training, development and employment of skilled manpower
- discussing potential advantages and disadvantages of various forms of labour group
- suggesting some practical steps to be taken in setting up labour cooperatives.

Taking labour requirements as given, Chapters 2 to 4 trace general trends in labour supply and their implications. They pinpoint a number of situations in which labour supply could be out of line with demand and consider in general terms how the balance might be restored. In Chapter 5, various types of agricultural cooperative and farm production group are described as models for labour sharing groups. Chapter 6 pursues this theme, examining the
case for extending activities of existing groups and suggesting some possibilities. A model of group action is developed in Chapter 7. From this follows a number of practical recommendations in Chapter 8 for those who are contemplating setting up labour cooperatives.

Since the subject is such a broad one, no attempt is made to cover every aspect. Instead the aim is to provide a general introduction, treating selected issues in more depth. The systematic approach to types of labour shortage in Chapter 3 might serve as a framework for discussion of the topic, for instance. The final chapters focus on human and social problems of farm production groups, these being in the author's opinion the most crucial and the most neglected aspects of agricultural cooperation. As Pickard put it, '... cooperation is very much more an exercise in practical sociology than an exercise in practical economics' (Pickard, 1970).

Inevitably some important aspects of labour cooperation have been neglected. The reader will find no discussion of financial or legal questions, for instance. These matters are obviously crucial but they lie outside the scope of the present study. At the time of writing in early 1979, plans are afoot to set up farm labour cooperatives in various parts of the country. For example, the National Farmers' Union together with the National Association of Agricultural Contractors is developing guidelines for labour relief cooperatives. When pilot schemes have been established, reports on their experience should complement the present study, filling in essential information on legal forms and procedures, economic and financial aspects as well as providing practical guidance on how to run a labour sharing scheme.

1.3 Sources of information

Five main sources of information have been used in the preparation of this report. Chapter 2 draws mainly on farm labour statistics collected in the annual June 4th. agricultural census.
6.

Personal communications with individuals involved in agricultural cooperation at various levels provided much of the material for Chapter 5 as well as being a source of ideas and critical comment throughout the project. Material in the study has been discussed with many individuals in Britain and Australia and a few in continental Europe. Assistance has come from farmers belonging to groups, syndicates and cooperatives, from group organisers and cooperative managers, from advisers of many varieties (agricultural, farm management, cooperative, training and socio-economic), who have had first hand experience of groups and from colleagues in agricultural colleges and universities engaged in research into agricultural cooperation and agricultural labour science.

To gain more insight into the workings of farmers' groups, two surveys were carried out, one on sugar beet harvesting syndicates and the other on training groups. In conjunction with a national survey into the profitability of growing sugar beet in 1976, information was gathered on the extent to which growers join forces in beet harvesting through joint ownership, lending or borrowing of harvesters or exchange of labour. Since the sample was a national one, it was possible to estimate the significance of cooperation in its various forms for the national sugar beet crop. Individual growers' attitudes towards cooperation and prospects for increasing joint action were also explored. Some of the findings appear in Chapter 8.

Agricultural training groups were included in the study for two reasons. In the first place, group training represents one very popular form of cooperation in British agriculture at the present time. Lessons learned from the success and failure of training groups could have implications for other types of cooperative, such as labour sharing groups. Insights from the training group survey were drawn into Chapters 6, 7 and 8. In the second place, joining a training group can be seen as one step towards cooperating in the training, development and employment of skilled labour in agriculture. The
type of farmer who joins a training group will be likely to have a positive and progressive approach to labour matters. He has demonstrated his willingness to join forces with neighbours to solve manpower problems. If labour sharing 'takes off' in this country, members of training groups may well be among the innovators and early adopters. Training groups themselves could form the basis for labour pools or relief labour cooperatives.

Finally, ideas have been gleaned from the literature of group dynamics and organisation theory. Sociologists and social psychologists, notably in the United States, have written profusely on the subject of organisations and groups. A simple model of how a group works, derived from this body of sociological theory, is presented in Chapter 7. Practical implications of the theory for the contemporary British farming scene are found in Chapter 8.
2. TRENDS IN LABOUR RESOURCES

The purpose of this chapter is to provide a background against which various types of labour imbalance can be identified. Labour demands in agriculture are not constant but fluctuate throughout the year, creating one set of problems. Downward shifts in numbers working on the land and accompanying trends in labour force distribution add to the difficulties of matching labour supply to demand. Certain tendencies are working in the opposite direction: increasing use of part time, casual and female labour, agricultural contractors and farm relief agencies ought to make for greater flexibility in labour use. Even so, farmers and full time hired men still account for most of the work performed on farms. Today the majority of farms in Britain are family businesses where the farmer and his family provide the main or the only regular source of labour. Labour supplied by a farm family is not constant but varies in quantity and quality over the course of the family developmental cycle. This is a further source of imbalance.

2.1 Trends in numbers and distribution of workers

Between 1950 and 1978 the hired labour force on farms in England and Wales decreased from 737,000 to 314,000, a drop of 57 per cent. Typically a farm employing four men in 1950 would have only two men today while many two-man farms have become one-man farms.

The way the labour force is distributed between farms adds to the difficulties of matching labour supply to demand. As Table 1 shows, in 1974 there was on average one farmer for every holding in England and Wales. There was not quite one full time worker (male or female, hired or family) for every holding, so some farmers must be working single handed at least some of the time. On holdings of less than 1,200 standard man days (smds), a theoretical labour requirement of four man years, the bulk of labour is provided by farmers
Table 1. Distribution of farmers and full time workers by size of farm business in England and Wales, 1974

<table>
<thead>
<tr>
<th>Size of business smds. per holding</th>
<th>Number of holdings 000s</th>
<th>Farmers mean numbers per holding</th>
<th>Full time workers mean numbers per holding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 275</td>
<td>87.3</td>
<td>0.7</td>
<td>0.2</td>
</tr>
<tr>
<td>275 - 599</td>
<td>46.3</td>
<td>1.0</td>
<td>0.4</td>
</tr>
<tr>
<td>600 - 1199</td>
<td>44.2</td>
<td>1.3</td>
<td>0.9</td>
</tr>
<tr>
<td>1200 - 1799</td>
<td>16.1</td>
<td>1.4</td>
<td>1.7</td>
</tr>
<tr>
<td>1800 - 2399</td>
<td>7.0</td>
<td>1.5</td>
<td>2.6</td>
</tr>
<tr>
<td>2400 - 4199</td>
<td>6.7</td>
<td>1.6</td>
<td>4.5</td>
</tr>
<tr>
<td>4200 and over</td>
<td>3.9</td>
<td>1.7</td>
<td>12.7</td>
</tr>
<tr>
<td>All significant holdings</td>
<td>211.4</td>
<td>1.0</td>
<td>0.9</td>
</tr>
</tbody>
</table>

Source: Agricultural census

themselves. Farms in the 275 to 600 smd range typify one kind of labour problem. Each of the 46 000 holdings has on average one farmer but they employ fewer than 18 000 full time workers between them. In theory these farms require more than one but less than two men full time throughout the year. The operator of a one-and-a-half man farm has to choose between employing another worker full time and bearing the cost of labour sometimes being under employed, or relying on suitable part time or casual labour always being available when required.

Table 1 implies that the larger the farm business, the wider the margin between theoretical labour requirements and the labour supplied by farmers and full time employees. Farms in the 1 800 to 2 400 smd range, for example, requiring in theory between six and eight men full time, employ on average only four, including the farmer. Either these farms are using large amounts of part time, seasonal or contract labour or the regular labour force is permanently under strength.
Averages can be misleading but frequency distributions tell a similar story. In 1977, for instance, only 32 per cent of the significant holdings in England and Wales employed any full time workers and only half of these had more than one. Fifty-six per cent of full time workers were employed in groups of four or less, five or less including the farmer. Less than one holding in a hundred had twenty or more full time workers (Table 2).

Table 2. Distribution of full time workers by number of full time workers per holding in England and Wales, 1977

<table>
<thead>
<tr>
<th>Full time workers per holding</th>
<th>Per cent of holdings with full time workers</th>
<th>Per cent of full time workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>48.5</td>
<td>18.1</td>
</tr>
<tr>
<td>2</td>
<td>23.7</td>
<td>17.7</td>
</tr>
<tr>
<td>3</td>
<td>10.7</td>
<td>12.0</td>
</tr>
<tr>
<td>4</td>
<td>5.5</td>
<td>8.2</td>
</tr>
<tr>
<td>5 - 9</td>
<td>8.3</td>
<td>19.5</td>
</tr>
<tr>
<td>10 - 19</td>
<td>2.5</td>
<td>11.7</td>
</tr>
<tr>
<td>20 and over</td>
<td>0.8</td>
<td>12.8</td>
</tr>
<tr>
<td>All holdings or workers</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Numbers</td>
<td>63 135</td>
<td>169 210</td>
</tr>
</tbody>
</table>

Source: Agricultural census

2.2 Trends in labour force composition

The main problems identified in the previous section were associated with shortages of full time workers and the inflexibility of a very small labour force. One way of restoring lost flexibility is to employ workers in units of less than whole man years, that is as part time or casual labour. Regular part time workers are those
employed for some part of every month in the year but working less than forty hours a week on average. In 1955 part time workers made up 12.4 per cent of the labour force on farms in England and Wales, by 1978 17.5 per cent. Over half the part timers were female, according to the 1978 agricultural census and nearly a third, members of the employer’s family.

Employing seasonal and casual labour is another way of adjusting labour supply to varying seasonal requirements. Numbers of seasonal and casual workers recorded on farms in the annual June 4th. census have been falling less steeply than numbers of full time workers. In 1955 seasonal and casual workers accounted for 12.7 per cent of employees on farms on census day, in 1978 27.8 per cent.

Employing female labour was once a means of economising in the wage bill. Since the introduction of the Equal Pay Act in 1975, women employed on farms have been entitled to the same rates of pay as men, which could mean a reversal of the previous trend towards increasing employment of women. From 1950 to 1978 the proportion of women in the hired farm labour force nearly doubled, from 14.6 per cent to 26.7 per cent. This was almost entirely due to increasing part time and seasonal employment, however. Numbers of women employed full time were declining over the period almost as rapidly as full time men (Gasson, 1976).

Increasing reliance on farm family labour could be another way of holding down labour costs. The opportunity cost of farm family labour may be low. Farmers and members of their families may be prepared, or obliged, to work for less than the statutory minimum agricultural wage. If family workers are not being paid an economic wage, it is less imperative that their labour be fully utilised. The family contribution to the farm labour force has been increasing because non-family workers have been leaving the land more rapidly. As Table 3 shows, farmers and regular family workers now account for 60 per cent of the regular labour force.
Table 3. Composition of the farm labour force in England and Wales, 1978

<table>
<thead>
<tr>
<th>Type of worker</th>
<th>Numbers 000s</th>
<th>Per cent of total labour</th>
<th>Per cent of regular labour force</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmers, partners and directors</td>
<td>229.4</td>
<td>42.2</td>
<td>50.2</td>
</tr>
<tr>
<td>Regular family workers</td>
<td>44.6</td>
<td>8.2</td>
<td>9.8</td>
</tr>
<tr>
<td>Regular non-family workers</td>
<td>182.2</td>
<td>33.5</td>
<td>40.0</td>
</tr>
<tr>
<td>Seasonal and casual workers</td>
<td>87.5</td>
<td>16.1</td>
<td>-</td>
</tr>
<tr>
<td>All occupied on farms on June 4th, 1978</td>
<td>543.7</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Agricultural census

2.3 Use of contractors

By cutting down the permanent labour force and hiring contractors, casual or relief workers at peak periods, farmers are making their labour supply more flexible. Use of agricultural contractors and relief agencies is thought to be increasing, although statistics are not easy to come by. The Manpower Working Group estimated that there were 15 000 people engaged in agricultural contracting in the United Kingdom in 1976, some of whom would provide labour as well as machinery (Agriculture EDC, 1977). It is thought that about half this number would be wholly or mainly engaged in agricultural contracting as machinery owners, employers or employees, the rest being farmers and their employees occasionally doing contract work on other holdings. There might also be some 2 000 relief workers who are either self employed or engaged by the 20 commercial relief agencies operating in Britain.
Burston (1977) showed that reliance on agricultural contractors is increasing. Data from the Farm Management Survey for England and Wales indicated that in 1970-1, expenditure on contract services amounted to 9.5 per cent of total expenditure on machinery and power on full time farms. By 1975-6 the corresponding proportion was 13.6 per cent. While total machinery costs roughly doubled over five years, expenditure on contract services nearly trebled.

Trends in labour supply since 1950 therefore indicate a steep reduction in numbers employed on farms coupled with some tendency to replace full time workers with part time, seasonal, relief, casual, contract and family workers. Nevertheless, despite their increasing numerical importance, the labour contribution of seasonal and casual workers, contractors and unpaid family helpers remains small in comparison with the labour contribution of farmers and regular workers. Sparrow (1972) calculated that in 1970, nearly half the work on farms in England and Wales was done by regular (full time or part time) hired workers while farmers themselves accounted for more than a third of the man hours (Table 4).

Table 4. Average weekly labour input on full time farms in England and Wales, 1970

<table>
<thead>
<tr>
<th>Type of worker</th>
<th>million man hours</th>
<th>per cent of man hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmers</td>
<td>10.1</td>
<td>36.4</td>
</tr>
<tr>
<td>Regular employees</td>
<td>13.4</td>
<td>48.4</td>
</tr>
<tr>
<td>Seasonal and casual workers</td>
<td>1.9</td>
<td>6.9</td>
</tr>
<tr>
<td>Farmers' wives</td>
<td>1.4</td>
<td>5.0</td>
</tr>
<tr>
<td>Contractors and their employees</td>
<td>0.9</td>
<td>3.3</td>
</tr>
<tr>
<td>Total labour input</td>
<td>27.7</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Sparrow, 1972
Since 1970 the contribution of regular workers has most probably declined and all other categories increased. Even so, farmers and regular workers must still be responsible for something like four fifths of all man hours worked, a situation which implies too little flexibility in the face of fluctuating and unpredictable labour demands.

2.4 The family developmental cycle

'The family in family farming is not a constant unit ... In course of time, a particular farm family will change in number, vigour and requirements. Frequently the farm resources available will not change to the same extent as either the quantities and qualities of labour to exploit them, or the needs of the family. Herein lies the basic problem of family farming' (Nalson, 1968: 38).

A number of writers have identified four phases of family development but Nalson found a division into three phases to be most useful when examining effects of the family developmental cycle on economic conditions of family farms. These phases are:

- an early phase in which either all the children are under 15 or the farmer's wife, though young enough to bear children, has no family
- a middle phase in which some of the children are of working age, live at home and work on or off the farm
- a late phase in which either all children have left home or the wife is past the age of childbearing and has no children.

In the early phase, the vigour of the parents will be greatest but demands of young children will place a strain on family income and upon the labour available to earn that income. Usually the farmer and his wife will be the only ones in a position to support the family. The work of the farmer's wife is likely to be particularly arduous at this time. Besides caring for children and running the household, she may have to assist her husband whenever farm operations
require more than one person. If the husband works off the farm to supplement family income, she will also have to cope with essential farm tasks while he is away.

In the middle phase of the family cycle, family demands are still high but labour of the children is available to work on or off the farm. If one or more children begins to work at home and the farm business is not large enough to provide full time employment for them all, labour surpluses will occur from time to time. If, on the other hand, sons and daughters find full time jobs away from the farm, the financial burden on parents will be less but the labour burden unchanged. Ideally, family members would find seasonal or part time jobs off the farm to fit in with slack periods on the farm but such jobs are likely to be few and far between.

The late phase is a period of lower family needs coinciding with declining vigour of parents. On larger farms with higher labour requirements and better prospects, it is unusual for all children to leave home. One at least will normally be prevailed upon to remain and help the parents, with the prospect of inheriting the farm. On small farms which are not an attractive proposition for the next generation, all children will be likely to leave home in search of better opportunities. From this time the aged couple may find it hard to support themselves and operate the farm efficiently.

As a consequence of the family developmental cycle, Nalson concluded that there will be at any one time some family farms where either a young or an elderly couple has difficulty meeting labour requirements and others where there is too much labour for the work available. This type of imbalance is inherent in the nature of family farming. It is distinct from imbalances arising through seasonal peaks of labour demand, a shrinking hired labour force and rigidities due to labour being supplied in units of whole man years.
Only about a third of full time holdings in Britain today employs any full time non-family labour. Where family farming predominates, the family developmental cycle must have considerable influence on the labour available to operate farm businesses. The problem is more severe in regions of small farms and high unemployment, notably Northern Ireland (Agriculture EDC, 1977) but under utilisation of farmer and family labour is a major cause of low productivity and hence low farm incomes on small farms everywhere (Agriculture EDC, 1973; Britton and Hill, 1975). Sometimes barriers of distance, lack of other jobs and low opportunity cost impede the mobility of surplus labour out of farming. Often, however, the problem is that family labour is needed on the farm for part of the year and so is not available for full time employment elsewhere.

2.5 Implications

Pressures to economise in labour use have left many larger farms seriously undermanned. Farms which might at one time have carried adequate, even ample reserves of labour now employ only enough to cover routine work in a normal year. Seasonal peaks like harvesting, autumn ploughing and drilling stretch the labour force to the limit. Being stretched already, there is no slack to cope with the occasional more difficult season. One problem is therefore to meet seasonal peaks of labour demand on large farms employing only a small permanent labour force.

The smaller the labour force, the harder it becomes to achieve a good match between labour supply and demand, so long as labour comes in whole man years. Table 4 suggested that more than four fifths of the labour input is still provided by farmers and regular employees, most of whom work full time. The fewer permanent workers there are, the harder it is to cope with the absence of one man. More than half the full time workers are employed on farms having five or fewer full time persons; half the labour-employing holdings have only one full time worker. If one person leaves or is away sick
in such a small labour force, a heavy burden is imposed on the rest whereas in a labour force of twenty or more, the absence of one man would scarcely be felt. This suggests there is a need to replace workers who are temporarily absent.

Many farmers employ no full time labour and so work alone for much of the time. The single handed farmer is in a particularly vulnerable position. Illness or injury could be disastrous for him. He might be reluctant to take a holiday, which could put a strain on family relationships. Monotony of the job without any prospect of a break could undermine his mental health. The fact that 60 per cent of the regular labour on farms is now provided by farmers and members of their families has another implication. Serious illness, injury or death of a family member not only removes a significant part of the labour force but can also mean heavy additional farm duties being imposed on other family members when they most need to be free, for example for hospital visiting or nursing. Relief workers capable of standing in for farmers could meet a very real need.

Apart from personal considerations, a farmer without regular help is handicapped when it comes to planning change and developing the farm business. By the nature of his job he is tied to the farm and has limited contact with other farmers, so that he is not in a good position to hear new ideas and discuss them. It may not be easy for him to stand back and take an objective view of his farm business. Difficulties in taking time off to seek advice may also constrain farm development. To be able to leave the farm in responsible hands on a regular basis, say once or twice a month, would be valuable for the single handed farmer.

If many farms are permanently undermanned, there are others where labour is not fully utilised. Nalson has shown that this is an inevitable consequence of family farming where there is little opportunity or tradition of off farm employment, especially in the middle phase of the family developmental cycle. To bring flexibility to this
situation, some kind of supplementary occupation is needed, either on or off the farm. Part time farming, agricultural contracting and forms of group farming and syndication were among the solutions suggested by the Manpower Working Group (Agriculture EDC, 1977).

To summarise, this chapter has argued that there are many farms in Britain which could profitably use more labour at certain times of year, which cannot justify employing another person full time. At the other extreme, some farms carry labour which is not fully and profitably occupied all year round, yet which cannot be released for other full time employment. Despite trends towards part time working, casualisation, feminisation and increasing reliance on contractors, lack of flexibility in the labour force remains a problem. While this chapter has touched on various types of labour shortage, the next will consider them in a more systematic way.
3. TYPES OF ADDITIONAL LABOUR DEMAND

This chapter is concerned with additional labour demands, that is demands which cannot be met by the regular farm labour force. One way of classifying demands is according to the skill required. Type of worker provides another breakdown. A third approach is to ask whether the demand can be predicted in advance. Combining these approaches gives a framework for identifying different types of labour demand.

3.1 Type of skill

Farm tasks may require no particular skill, 'farm' skill or 'extra' skill. The degree of skill needed for tasks like driving a tractor, picking fruit or rounding up straying animals can be readily acquired but nowadays most farm work demands more than superficial skills. The 'willing pair of hands' may be less of an asset today than it was in the past. In view of the amount of machinery and toxic chemicals on the modern farm, it may be a positive hazard to safety. This report is mainly concerned with provision of skilled labour.

For present purposes 'farm' skills can be loosely defined as those which an experienced farm worker would be expected to have mastered. An arable farm worker would be expected to be a competent tractor driver, a dairy cowman skilled at maintaining milking equipment and recognising cattle diseases, and so on.

'Extra' skills are those required for farm tasks but not usually possessed by the average farm worker. Veterinary work, repair and maintenance of machinery, construction and maintenance of farm buildings, land improvement, education and training of workers, farm planning and preparation of accounts are examples of tasks which may require specialists. Many of these skills have been divorced from the farm labour force in the course of the post war technological revolution.
A case might be made for restoring some of them to the farm workforce. Apart from the need to reduce costs, desire to have a job done speedily at the most convenient time and to avoid frustrating delays might justify cultivating extra skills among the regular labour force. Some farm workers already possess extra skills; an employee might have worked previously in the building trade, for instance. Larger farms carry their own specialists such as mechanics, estate workers, office staff and even a training officer or a company vet. Extra skills can also be acquired on training courses.

3.2 Type of worker

Within the farm skilled category, a distinction can be made between the need for extra labour to supplement regular workers at busy times and the need to replace a worker. Supplementary labour can be supervised by the farmer or a regular worker whereas a replacement may have to take important decisions on his own. If it is the farmer himself who is being replaced, the relief may have to take over the entire running of the farm, possibly at short notice, with nobody to whom he can turn for advice. Clearly, a replacement needs to be a highly resourceful and responsible person. These qualities would be desirable but less crucial in an 'extra pair of hands.'

Demands for additional labour may be linked with use of machinery which the farm does not own, or does not own exclusively. Multi-farm use of agricultural machinery covers a range of possibilities (Lönnemark, 1967). At one extreme, a farmer simply borrows a machine from a neighbour and uses it himself. At the other extreme, he may lease some of his land to a contractor or a cooperative for the cultivation of a specialist crop, all operations being carried out by the lessee. Between these extremes are many instances where machinery is borrowed, the regular labour force is involved but additional labour is also required. This additional labour may possess farm skills or extra skills.
21.

A farmer may be expected to provide supporting members of a team working the machine. Tractor drivers may be needed, for instance, to transport grain, forage or sugar beet from the harvester in the field to the drier, silo or loading point. If the regular labour force is already working at full stretch, the farmer may need to hire additional labour to complete the harvesting team. This labour only needs farm skills.

Large and complex pieces of machinery such as pea viners may require specialist operators. The average farmer or farm worker might not be able to get the best performance from the machine. Agricultural contractors normally operate their own machines or send skilled operators with them. Machinery syndicates may rule that a machine must always be handled by the same driver, who might be an agricultural contractor belonging to the syndicate or an employee of one of the members who has had special training. Either way, by having the machine on his farm, the farmer automatically employs additional labour with an extra skill.

3.3 Predictability of demand

Another kind of distinction can be made according to the predictability of the demand for additional labour. Some kinds of demand are entirely predictable, their timing being wholly within the farmer's control. Reclamation and building work, farm maintenance and holidays for the farm family come into this category. These labour demands can be scheduled for slack times in the farming year and if necessary postponed. (This is perhaps a slight exaggeration; timing of building work will also depend on the convenience of the builder; family holidays may have to be taken in school holidays and so on).

Some labour requirements are predictable but not wholly or not at all within the farmer's control. Seasonal peaks of labour demand, for example, are predictable but unavoidable, at least in the short term. In the long run they might be avoided by growing different crops or changing livestock enterprises. Holidays and time off for
hired workers are also predictable and within control of the farmer to some degree. Workers might be persuaded to postpone their holidays temporarily for a just cause but the employer is not within his rights to deny employees time off or holidays indefinitely.

Thirdly there are situations which are wholly unpredictable and beyond the control of the farmer. Illness, injury or death of a regular member of the labour force, emergencies like fire, storm and flood come into this category. Other contingencies like mechanical breakdowns, straying livestock or workers leaving at short notice can be equally disastrous in their consequences. They might be regarded as unpredictable, although some farms are more prone to suffer than others.

3.4 A typology of labour demands

The nine combinations shown in Table 5 vary in predictability, type of skill and type of worker needed. Situation (c) requiring a replacement worker with farm skill in an emergency could be regarded as the most critical. Situations (d) and (g) which call for additional help for tasks which are entirely within the farmer's control are the least critical. Examples of each type of labour demand are described.

(a) Replacement for a dismissed worker; holiday relief for farmer and family. Quality and reliability of the replacement are very important but the farmer has time to select carefully.

(b) Replacement for regular workers during holidays and at weekends; replacement for workers whose departure is expected, for example those retiring or attending full time further education. Here the farmer has warning of the situation and therefore has time to select and train a suitable replacement.

(c) Labour force emergencies such as illness, injury or sudden death of a member of the regular workforce; need to replace a key worker who leaves at short notice. As there is no warning, the employer may be obliged to accept the first possible replacement rather than waiting to engage the most suitable person.
Table 5. A typology of demands for additional labour

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(d) Additional farm labour needed for major land improvement projects. The project may have to wait until labour is available.

(e) Peaks of labour demand such as shearing, harvesting or fodder conservation. Extra tractor drivers may be needed to support the harvesting team.

(f) Farm emergencies like fire, storm, flood, straying livestock; minor accidents and breakdowns. Farm skills are not essential, any able bodied person could help, but it is likely that persons with farm skills will be first on the scene.

(g) Major capital improvements such as constructing farm buildings; training workers. Tasks like these demand extra skills not necessarily developed in the farm workforce, although members could be sufficiently skilled.

(h) Persons with extra skills are needed at certain times in the farming year. Skilled operators of harvesting machinery not owned by the farm; accountants.
(i) Farm emergencies requiring extra skills include major breakdowns of machinery or plant, serious accidents to members of the workforce, disease or injury to livestock, farm fires. The line dividing category (i) from (f) is a tenuous one. In any emergency, members of the farm workforce will most likely be first on the scene to summon professional assistance. Prompt action by farmers and farm workers may often avert a major catastrophe.

Throughout the rest of this study, reference will be made to the typology of labour demands summarised in Table 5. Different needs call for different solutions and Chapter 5 will suggest models for coping with each type of labour shortage. First Chapter 4 considers advantages and disadvantages of cooperative as opposed to commercial or informal approaches to meeting demands for additional labour.
4. TYPES OF SOLUTION

The previous chapter was concerned with labour requirements which cannot be met by the regular labour force. This chapter considers different ways of meeting such demands. Means of providing additional labour can be classified as informal, commercial and cooperative.

Informal arrangements imply that help is given on a personal, friendly, quid pro quo basis involving no financial transaction. Relatives, friends and neighbours are most commonly providers of mutual aid. Yet provision of neighbourly help or mutual aid is unlikely to be 'free' in the widest sense. To accept help puts the recipient under a certain social or moral obligation. Absence of a legal agreement does not make the obligation any less binding.

Commercial services are made in the expectation of a profit. They are paid for at a rate agreed in advance. Agricultural contractors, farm relief agencies, seasonal and casual workers are 'commercial' sources of additional labour. Such arrangements do not in theory carry any social obligation, any exchange of favours, any commitment to use the service again. In fact, social ties may well reinforce the contractual agreement. An agricultural contractor strives to cultivate good relationships with regular customers; farmers are sometimes under a social obligation to engage the same band of seasonal workers from year to year.

Cooperation differs from commercial provision of services in that the service is provided for the mutual benefit of users, at their instigation and not on the initiative of the provider, for his profit. Any surplus accrues to users in proportion to the amount of services used and not to the entrepreneur supplying the service nor those providing capital. Policy decisions are made jointly by users or their elected representatives, not by entrepreneurs.
Cooperative arrangements differ from informal, friendly exchange of help in that there is prior discussion and formal commitment to a scheme which is legally binding and which continues on agreed terms for a defined period. Although cooperation and informal aid or 'helpfulness' are often regarded as synonymous, there is a distinction between them. In cooperation there is a shared goal and it is their relationship to the goal that binds cooperators together. In helpfulness or mutual aid, the goal is not shared but it is the relationship between helpers which is binding. Emphasis is on the social or moral obligation to help someone reach his goal whereas in cooperation, emphasis is on the participants' mutual interest in getting a job done. Helpfulness is an end in itself, cooperation a means to an end. In the words of one farm management adviser, 'cooperation should be all about selfishness' (Dancey, 1977).

4.1 Informal arrangements and mutual aid

Members of farm families are possibly the most frequent providers of additional labour. Rarely would there be any contract of employment. Strong moral pressure is brought to bear on members of the household to lend a hand at busy times and in return, the farmer is under strong moral pressure to provide board and lodging as well as loyalty and emotional support. It is taken for granted that such arrangements will continue but they fall outside the scope of this report.

Help may be provided informally in order to entertain the helper. Offers of assistance from farm holiday visitors and schoolgirls who work in stables in exchange for free rides, are familiar examples. Satisfying the visitor's wish to be involved may take precedence over the farmer's need for labour at that particular time. Help of this kind may be very welcome and timely and it may bring other benefits in the shape of friendship and deeper understanding between farm and non-farm families. It is not likely to be a reliable or predictable source of additional labour, nor farm skilled. For these reasons it will not be considered further.
Of a different kind is neighbourly help given in an emergency such as a disaster on the farm or illness in the farm family. It is given spontaneously and cannot be counted on before the event, though recipients often profess to have been overwhelmed by the generosity of the response. Such help might put the recipient under a moral obligation to the community rather than to individual helpers.

Mutual aid or neighbourly help at regular peaks in the farming cycle is another type of informal arrangement. It implies an obligation to exchange something in kind. Labour may be exchanged for labour, for hospitality, for use of machinery or for other services but not for cash. Mutual aid is encountered most often among relatives, among smaller farmers and more 'traditional' farmers. It appears to have persisted more in some areas than others, the Fens, parts of upland England and Wales being regions with a strong tradition of neighbourly help.

Rees (1950) in his book 'Life in a Welsh Countryside' gives a graphic account of neighbourly help in a Montgomeryshire parish in 1940. Nearer the present day, the role of informal cooperation was investigated in a study for the Agricultural Training Board of manpower on hill farms in Wales (Lees and Colyer, 1973). About two thirds of farmers visited in one part of the study were found to cooperate informally with their neighbours. Interesting regional variations were discovered, hill farmers in Snowdonia being far more cooperative than those in Denbighshire, for example. Cooperation was most often associated with sheep gathering, shearing, dipping and washing, a finding confirmed by Thomas (1970) in his study of agricultural cooperation in a Merionethshire valley. Even so, only a fifth of the farmers in Lees' and Colyer's study cooperated in shearing, two fifths relying entirely on their own labour and a further thirty per cent on contractors. Most cooperators looked upon the arrangement as a means of increasing labour supply to meet a peak demand. Relatively few sought an extra skill, such as shearing, which was not present in the regular workforce.
While informal arrangements may continue to meet a need, modern trends in farming seem to be undermining the traditional basis for neighbourly help and mutual aid. First, tendencies towards increasing specialisation and concentration of farm enterprises could limit farmers' scope to help one another. It is one thing to milk a neighbour's cows as well as your own when herds average only ten cows, another thing altogether with herds of eighty.

Second, informal arrangements tend to break down because difficulties have not been anticipated, no proper provision has been made for dealing with disagreements and there is no commitment to continue with the arrangement for a stated period. Memories of unfortunate experiences with 'friendly' arrangements may have turned some farmers against the thought of cooperation in any form. As farming becomes more of a business with more capital at stake, farmers may feel the need for more formal, guaranteed arrangements.

Third, farmers with a more 'commercial' approach to the business of farming tend to regard labour, including their own labour, as a scarce resource with an exchange value. One Welsh farmer in the training group survey suggested that farmers who used to give neighbourly help without stint were beginning to put a value on their time. The modern approach implies an agreed rate of exchange for labour. As Thomas (1970) put it, Welsh farmers now appear to be continually working against the clock and cannot indulge themselves in neighbourly acts to the extent possible in more leisurely times.

Besides this, reliability and quality of labour, the knowledge that workers will always be available when required and will be of sufficient calibre to cope with demands of modern technology, may be gaining precedence over obligations to relatives and friends and even considerations of cost. Informal arrangements, socially rewarding as they may be, cannot always be relied upon. Well meaning relatives retired from farming may not be able to handle large numbers of livestock or cope with the complexities of modern machinery.
29.

The position taken in this paper is that while informal arrangements which predominated in the past may continue to meet a short term need, any future development of additional labour services will have to be on a more formal basis (a point with which Jones and Phillips (1969) would not agree). Farmers may be less willing or able in future to help one another without counting the cost and demands for supplementary labour are likely to increase. This leaves a choice between commercial and cooperative solutions. Commercial options have been available for a long time and in all probability will continue to satisfy the greater part of the demand for additional labour. As Chapter 2 showed, use of part time and casual labour, contractors and relief agencies appears to be increasing. There are nevertheless a number of reasons why cooperative arrangements might prove more satisfactory.

4.2 Commercial versus cooperative arrangements

If commercial arrangements satisfy a need and are under no threat, there is little point in discussing alternatives. Not all farmers are wholly satisfied with commercial sources of additional labour, however. Reports of commercial relief services are not universally favourable, although many users find them completely satisfactory. In some parts of the country, seasonal and casual labour may be pricing itself out of the market. The supply of agricultural contractors is generally ample but contractors provide a machinery rather than a labour service, which does not meet every contingency.

A cooperative organisation will always have certain advantages over a commercial organisation. First, since any trading surplus in a cooperative is returned to users, cooperatives could provide a cheaper service. Second, a cooperative might break the monopoly of a commercial organisation, resulting in more competitive rates and a better service for commercial customers as well as cooperative members. Third, cooperative members initiate the service and make policy decisions. Labour services provided by a cooperative might therefore be more responsive to members' needs than services provided on a commercial basis.
Apart from advantages which apply to any cooperative there are benefits more specific to labour sharing groups. Labour relations in agriculture are on the whole personal relationships, an aspect which many farmers and farm workers appear to value (Newby, 1977; Newby et al., 1978). Almost by definition, labour which is additional to the regular workforce is excluded from this intimate relationship but it may be felt desirable to foster personal ties as far as possible. A relief worker employed by a small group of farmers on a permanent basis would soon get to know them all. This could be an asset if, for example, he had to take over the running of a farm in an emergency. Here a small group would score over a large commercial agency which supplied a succession of strangers. Besides, employing a local relief worker could save farmers costs of travel and housing.

A cooperative could utilise labour already available on members' farms and so help to improve labour productivity. As shown in section 2.4, family farms are liable to suffer from alternating labour shortages and surpluses. Although _ad hoc_ arrangements between farms could smooth out peaks and troughs to some extent, formal arrangements for pooling labour could be a more effective means of putting farmers in touch with one another.

Group action can bring other benefits. On the principle that two heads are better than one, discussing a common problem with others can stimulate a flow of ideas and generate enthusiasm in searching for a solution. Group decisions can be enhanced by the range of members' knowledge and by increased critical power. There is less danger of a group overlooking the obvious answer. The value of pooling existing knowledge and experience should not be under rated either.

If farmers can cooperate successfully in such activities as buying requisites, marketing produce, operating shared machines or training workers, there ought to be scope for the same farmers, or others like them, to cooperate in supplying additional labour. Relief labour cooperatives, labour pools and group workshops are some examples of schemes already operating successfully in Britain or overseas.
5. MODELS OF LABOUR SHARING GROUPS IN AGRICULTURE

Three main types of demand for additional labour were identified in Chapter 3. These were for farm skilled replacements, for farm skilled workers to supplement the regular labour force and for specialists with skills not found in the regular labour force. This chapter takes each type and considers ways in which group action could meet the need. Existing labour cooperatives and groups are described as models while parallels are drawn with organisations such as machinery syndicates which fulfill similar functions.

The object of cooperating in labour use is to increase flexibility of labour supply in response to variable demands. Since farming is a business, any labour sharing scheme needs to combine economy with reliability; the cheapest solution may not be sufficiently reliable. Quality of labour supply is another consideration, involving experience, skill, responsibility and initiative. In certain situations familiarity with the additional worker and the worker's familiarity with the farm could be an asset.

5.1 Replacing a regular member of the labour force

By definition a replacement worker needs to possess farm skills but he must be far more versatile than the average farm worker. If his speciality is relief milking, for example, he must be familiar with all types of milking machine. By implication he must be a responsible and resourceful person as he may be called upon to take over the running of a unit or a whole farm at short notice, without anyone on the spot to give advice. Since he may be summoned at a time of crisis, a sympathetic personality would be an asset too. A relief worker possessing all these qualities ought to be able to command a high wage.
An organisation set up with the primary object of supplying relief workers of high calibre in emergencies has to balance quality and reliability with economy. One problem is to ensure that relief workers are always available at short notice and yet to see that these highly paid workers do not remain idle between emergencies. The task of securing a good match between labour demand and supply has in effect been transferred from farm to relief organisation.

One possibility is to have such a large network covered by the relief organisation that calls on the service average out to a steady demand throughout the year. Drawbacks could be higher cost and less personal service. If relief workers have to travel long distances and work far from home, farmers have to bear costs of travel and accommodation. There might also be a high turnover of workers which could threaten quality and reliability of the service and would probably be reflected once again in higher costs. With a large relief organisation, too, the desirable degree of familiarity between employers and replacement workers is harder to achieve.

Another possibility is for the organisation to find relief workers other employment which they could leave in emergencies. In terms of Table 5, the organisation would not be exclusively concerned with situation (c) but would also provide labour for situations (a) and (b), (d) and (e). In fact there is no reason why relief workers should confine themselves to farm skilled jobs. The more skills they possess, the less risk that they need ever be unemployed. Relief workers might acquire extra skills, enabling them to meet demands under (g) and (h) as well.

Another alternative is for the organisation to employ a small permanent staff of relief workers while having on its books names of self employed or part time workers who could be called upon if necessary. Here flexibility would be embodied in the 'spare' relief workers, the organisation performing a useful function by putting farmers and relief workers in touch.
A relief labour cooperative requires an organiser. He would be responsible for the day-to-day running of the scheme which would involve receiving requests for help, organising the relief worker's time, seeing that time sheets were filled in correctly, invoicing members and so on. Smooth operation of the group would also be his responsibility. This might mean handling complaints about the service and sorting out disagreements between members. The organiser would be the person to arrange group meetings. A group might also designate the organiser as nominal employer of the relief worker. This would help to avoid the kind of conflict which is inevitable when one worker is answerable to more than one boss.

Practical, day-to-day running of a relief labour scheme could be undertaken by a farmer's son or wife or a farm secretary but other functions, such as smoothing out difficulties between members and employing the relief worker, call for a person with greater authority. For this reason one of the farmer members or a retired farmer might make a better group organiser.

5.1.1 Farm relief cooperatives in the Netherlands. The primary aim of relief labour cooperatives in dairying regions of the Netherlands is to provide a highly qualified relief worker who can take over the running of a farm in an emergency. Soon after the war, Dutch farms began to experience 'the drift from the land.' By the mid-1960s, not only hired workers by also farmers' sons were leaving the land in large numbers. This was destroying the traditional basis for neighbourly help. When a farmer was sick or in trouble, he could no longer count on neighbours to run his farm. This problem was particularly acute for dairy producers. Lacking anyone to fall back on in emergencies, many of them felt understandably reluctant to expand their herds.

1. Based on the report of a visit to the Netherlands by Hill, Morley, Middleton and Shorney to study forms of cooperation in farm production, in December 1974.
In 1960 a group of about twenty Friesland dairy farmers formed an unlimited liability cooperative to employ a relief worker. The cooperative aimed to break even. Working expenses, being the man's wages and administrative overheads, were secured by a loan from the agricultural bank. (In the event, costs were covered by charges to farmers who made use of the service.) The local dairy cooperative, sympathetic to the idea, helped by finding employment for the man when there was no work for him on members' farms.

Dairy relief cooperatives are particularly suited to provinces like Friesland with a large preponderance of highly productive dairy farms run by farmers without regular help. The idea spread rapidly and soon the whole province was covered by a network of similar relief cooperatives. In 1974 it was estimated that 40 per cent of Friesland farmers, farming 70 per cent of the area, had joined labour cooperatives. Other dairying regions followed suit and by 1977 there were almost 200 such societies in the Netherlands, employing about 750 relief milkers and with a total membership of over 35,000 farmers. Local relief cooperatives have linked to form provincial associations and the Rural Contacting Organisation for Farm Relief Services now provides a national forum (Bruin, 1977). One of the effects has been to give the single handed dairy producer confidence to expand his herd. It is said that many such farms could no longer survive without their local labour cooperative.

Relief workers are highly qualified, trained and experienced employees of the cooperative, often farmers' sons. Like most farmers' sons in the Netherlands, they would have spent four years at agricultural school. Before joining the regular rota in the relief service they spend up to a year in a variety of jobs to prepare them for relief duties. At one time relief workers were required to work in dairy or supply cooperatives as part of their training. To overcome problems of fluctuating demands being made upon a single pool of labour, relief workers are trained in a range of extra skills including building construction, soil testing and routine veterinary tasks. They could
therefore be employed in almost any of the situations defined in Table 5. Emergencies nevertheless take precedence over other commitments.

An ideal size for this type of cooperative appears to be one organiser to twenty permanent relief workers with four to five hundred members. The organiser, who is usually a full time employee of the cooperative, can call on part time workers and borrow staff from neighbouring cooperatives if demands are unusually heavy. Large membership, versatile workers, links with other cooperatives and with self employed relief workers are ways by which this type of organisation combines flexibility with economy.

Compared with the average agricultural worker, Dutch farm relief workers are well paid, earning some twenty per cent above the normal wage in 1974 and receiving fringe benefits in the form of a car and a telephone. It is intended that relief workers should live at home and work within a ten mile radius, which implies a high density of membership. Apart from the fact that it is uneconomic for highly paid workers to spend much of their time travelling to work, living at home means that the relief worker will be a familiar figure to many of his clients. Job satisfaction among relief workers in the Netherlands is said to be high and turnover low.

Although Dutch dairy farmers can call on relief services for replacement labour, an extra pair of hands or additional skills, at short notice or in advance, it is estimated that in practice most look upon their membership of the cooperative as a form of insurance against illness. Half the members make no regular use of relief services. They can choose whether to pay a high annual premium, in which case they are entitled to relief labour at a cheap rate, or a lower premium coupled with a higher daily charge. In 1974 the higher premium was £30 with a daily rate of £1.60, the lower annual charge being £12.50 with £2.40 daily. If a farmer is ill and in financial difficulties, a low rate of relief labour under the cooperative system must be of considerable benefit to him. More recently a double rate
has been introduced, members paying more for holiday relief than for relief needed due to illness (Bruin, 1977). Government subsidies to relief labour cooperatives, introduced in 1965, are due to be phased out in 1980.

5.1.2 New Zealand farm relief cooperatives. Dairy relief labour cooperatives of a different pattern were developed in New Zealand in the late 1950s, possibly following an innovation in Western Australia. A group of perhaps twenty dairy farmers with herds of similar size, all single handed and living in the same district, employs one relief milker full time. He is also provided with a house. The first call on his time is for illness. After this, each member is allocated the relief worker for two weeks. Members have some choice of time although they may have to ballot for the most popular weeks. The relief worker can be used as an extra pair of hands at silage making, as a replacement milker while the farmer goes on holiday or to help with routine maintenance work on the farm (situations e, a, b or d). If he is called to an emergency for more than a short period, however, each farmer's share of regular time is scaled down.

The New Zealand type of scheme handles unpredictable labour demands in a fairly equitable way without detracting from the contribution which the relief worker can make in other directions. Compared to the Dutch scheme, provision of relief labour is not so reliable. A farmer cannot guarantee before the ballot that he will be allocated the relief worker for the weeks he wants. Even if promised the worker at this time, an emergency on another farm could leave him no better off than before. If two dairy farmers broke a leg on the same day, presumably only one of them could benefit from the relief service. In terms of Table 5, the Dutch scheme takes better care of situation (c) while the New Zealand system places more emphasis on the more routine and predictable demands of situations (a), (b), (d) and (e).
5.1.3 Small groups employing a relief milker. Another variant is for a group of six or seven dairy farmers to employ one full time relief worker who would milk one day on each farm in rotation. Assuming them to be single handed farmers, this would guarantee them one day free of milking in every seven to ten days. The farmer could use his free day as a holiday, to catch up on routine farm maintenance work, to attend to business matters or to plan farm improvements.

An essential feature of this type of arrangement is that the relief worker can be relied upon to come regularly and not just to fill in time between emergencies. This is in contrast to the two previous examples where predictable routine demands take second place to more urgent calls. Under the present scheme, emergencies would have to be handled by other means. The service would be geared to situations (a) and (d) rather than seasonal demands (e) or the unpredictable situation (c).

Following a CEPFAR conference on farm relief services, the National Farmers' Union and the National Association of Agricultural Contractors have been developing guidelines for relief milker cooperatives in Britain. The idea is to establish locally based relief groups of about six farmers, who would employ a local man full time and provide him with housing. Groups would be serviced by existing commercial relief agencies and linked in a regional or national network (Pacey, 1978).

Small groups organised by commercial agencies could expect to pay commercial rates for relief workers. In 1979, Grade 1 relief milkers from one of the leading contract milking and relief agencies in Britain cost £1.75 per hour for all hours worked plus an agency fee of £2.15 per day for each booking. Board and lodging would cost at least £5 per day, depending on the area and the time of year. This adds up to a commercial charge of about £25 per day, assuming ten hours of work and board and lodging at £5. Employers also pay 8 pence per mile up to a maximum of £12 per journey for travel to the job and 6 pence per mile for internal travelling (Stirrett, 1979).
The Norwegian Government, under pressure from farming organisations, introduced two labour relief schemes in 1976. This was part of a six year plan to bring farm incomes and working conditions into line with those in industry. One scheme permits small farmers who cannot justify employing labour full time, to hire workers as a group so that they can enjoy some free time. Three or four farmers join forces to employ one man who helps each member in turn. In 1976 it cost about £6 000 to employ a full time agricultural worker in Norway. The Government provides a grant of £600 to farmers working at least 1 800 hours a year, the minimum to qualify for the scheme, rising to a maximum of £1 200 for farmers working 3 600 hours. This brings hired labour within the reach of the small producer. The other scheme allows farmers to take at least three weeks' annual holiday. Here the Government pays £16 a day towards the average commercial charge of £20 per day for a holiday relief worker (Ley, 1976).

5.1.4 Informal arrangements with a part time worker. As the regular labour force shrinks, greater use is being made of self employed local relief milkers. Better workers are in a position to choose their clients and raise their charges. In order to safeguard their own supply of relief labour, some groups of two or three farmers are making arrangements with individual relief workers to come to them when required. The group contracts to have first refusal on the worker's time, as it were. Higher rates, guaranteed work or some other favour may be offered in return for the worker's loyalty.

Simple arrangements like these might grow out of mutual aid. They are discussed here under the heading of 'cooperation' although they are only one step removed from informal, friendly arrangements. It is unlikely that there would be any formal contract. The relief worker might be a small farmer or farm family worker, willing to take casual employment off the farm but not available for full time work. He would only be called upon in emergencies or at busy times, meeting demands in situations (b), (c), (e) or (f). The worker himself provides flexibility, combining a number of temporary or part time jobs at his own discretion.
5.1.5 Comparison of schemes to provide relief workers. The four schemes outlined above, which should perhaps be regarded as models rather than concrete examples, can be compared in terms of flexibility, reliability, worker quality, familiarity and cost.

Dairy relief cooperatives in the Netherlands achieve flexibility by training workers in many skills and covering a large membership. Where a large proportion of the farming population joins the scheme, quite a small area will support a viable cooperative. Where farms are larger and less uniform, as in Britain, a cooperative seeking to recruit five hundred members with similar needs might have to cover several counties. Drawbacks would then be higher travelling costs and fewer effective working hours as well as less personal relationships between employers and relief workers. All the other schemes allow relief workers to live in the neighbourhood where they can become familiar with members, their farms and families.

New Zealand cooperatives and smaller groups aim to keep one man fully occupied. Here increased flexibility, in the sense of matching labour supply to demand, is balanced by decreased reliability; there is less certainty that a relief worker will always be available if required. Informal arrangements as described in section 5.1.4 are the most flexible but the least reliable.

Only in the Dutch scheme are relief workers formally trained for their role. Under other schemes it would be up to the farmers concerned to engage a suitable worker. Where a house is offered with the job, many applicants can be expected. If the idea is to recruit a local man who already has accommodation, choice could be rather limited.

Costs of a relief service include administrative overheads, costs of employing a relief worker, travelling and accommodation. As noted above, the Dutch and Norwegian Governments have subsidised dairy relief labour schemes.
The Dutch scheme with its full time organisers and large membership would be the most costly to run but overheads would be spread thinly, so that fixed charges per member need not be excessive. Small groups linked to a commercial agency could expect to pay commercial rates for a professional service. Other small group schemes might be run by one of the members for an honorarium. This would be cheaper and satisfactory providing one of the members could be prevailed upon to undertake the task, something which busy dairy farmers might wish to avoid.

Relief workers employed under any scheme would expect to earn more than average agricultural wages, the premium in the Netherlands being twenty per cent. Farmers whose livelihood depends on dairying, who normally milk the cows themselves, who require relief milkers of the highest calibre to replace them, must expect to pay accordingly.

Costs of a relief scheme will vary considerably depending on whether the group provides free accommodation, board and lodging, travelling expenses or none of these things. An ideal arrangement might be to engage a man already living locally in his own house. Yet first class dairy cowmen usually live in tied houses and are rarely unemployed and looking for work. Even so, the prospect of a more varied job with several employers and herds, offering more autonomy, might well appeal to some. As is so often the case with agricultural employment, much seems to hinge on the availability of housing. Under the New Zealand scheme and the British proposals, housing would be provided by the group. This means adding rates, insurance, repairs and maintenance and a proportion of rent payable to the owner of the house, to the cost of the relief service. A telephone would be necessary too. The group might also provide a vehicle or subsidise the cost of travelling between farms.
On balance, larger schemes probably win on reliability, smaller schemes on personal contact and confidence in the relief milker. Costs will vary considerably, depending partly on how accommodation and travelling costs are met. An obvious but important lesson is that the ideal scheme can only be designed after careful study of the exact nature of members' needs and problems.

5.2 Supplementing the regular labour force

Seasonal operations like shearing or harvesting and major farm improvements may stretch the permanent labour force too far. Additional labour is needed to supplement the regular workforce at such times. 'Commercial' alternatives are to employ seasonal or casual labour or to hire contractors who provide operators with machines and sometimes additional labour as well. 'Informal' arrangements may exist under which farmers and members of their families are expected to exchange help at busy times. Many of these arrangements have stood the test of time. It is only if existing arrangements are threatened or if new demands arise which cannot be satisfied by conventional means, that farmers need to consider alternatives. For example a local contractor may go out of business; new crops may be grown requiring large labour inputs; newcomers to farming may be unable to join the informal network. Two 'cooperative' alternatives considered in this section are labour pooling and joint provision of seasonal labour.

Cooperative schemes to provide relief labour were appraised in terms of flexibility, reliability, quality, familiarity and cost. Where labour is engaged to supplement the existing labour force, familiarity with the farm is not important and qualities of responsibility and initiative much less critical than for a relief worker who might be put in charge of the entire farm. While experience and skill are obviously desirable, farmers and other permanent workers will be available to supervise the additional workers. This leaves flexibility, reliability and cost as three criteria for judging supplementary labour schemes.
5.2.1 **Labour pools.** Labour pooling is one means of smoothing out peaks and troughs of labour demand. Rather than employing additional labour, the idea is to make better use of spare capacity already available on farms within a group. Advantages of such a scheme are that additional labour of known quality is available when required and that profitable employment is found for workers who might otherwise be underemployed. Providing labour peaks on all farms do not coincide exactly and providing aggregate labour supply is sufficient to meet aggregate requirements from season to season, labour pooling should be feasible.

This approach is probably most appropriate for arable farms, since labour density tends to be higher than on livestock farms and peaks and troughs of labour demand are more pronounced. In the Netherlands, for example, the average farm in arable provinces has one employee besides the farmer, the main demand being for supplementary labour at peak periods. Relief labour cooperatives in arable regions typically employ only a small permanent staff, drawing as far as possible on spare labour capacity already available on members' farms for seasonal requirements. This is in contrast to dairying provinces where cooperatives are more likely to employ full time relief workers. In machinery cooperation a similar pattern is observed, arable farmers tending to pool machinery they already possess, livestock farmers hiring cooperative-owned machines and personnel to operate them (Hill, Morley, Middleton and Shorney).

Labour pools could be modelled on machinery rings operating in continental Europe, examples of which have been described by Owen (1949) and Lühnemark (1976). They differ from informal networks of mutual aid and neighbourly help in that members are formally committed and have to abide by written rules. Farmers meet before the start of the season to agree on rates and standards of working and an annual tariff of rates is published. A pool needs a part time organiser, possibly one of the members or a retired farmer, to act as a clearing house for requests and offers of labour, keep records of all work done and charge members accordingly. It is envisaged that farmers would
commit employees or family workers to the pool rather than contributing themselves. Pool workers would always be answerable to the farmer on whose farm they happened to be working.

Labour pooling will often follow from cooperation in machinery use. Supplementary or seasonal labour may be needed in conjunction with large and specialised items of machinery such as harvesters. Where a harvester is syndicated and operated by a group, labour sharing is a logical development. In the Netherlands, some machinery syndicates and labour cooperatives have been brought together in the same organisation. Members may work together to make a larger or better balanced team or one member may supply an operator for which other members pay in cash or in kind. When small and large farms belong to the same machinery syndicate, it is often larger farms which provide extra power and machinery while smaller farms pay for whatever they receive. Labour pooling can therefore be a logical extension of machine sharing. Having started exchanging labour in conjunction with one particular piece of machinery, labour sharing might spread to other farm enterprises.

While labour pooling seems especially well suited to meeting peak labour demands like harvesting (situation e in Table 5), it could also be extended to situations (d) and (f). Situation (d) is the non-urgent task requiring an extra pair of hands, which could be planned for a time when spare labour would be available in the pool. A labour pool might also contribute in a farm emergency, situation (f). Farmers and workers who are familiar with the layout of a neighbouring farm through having worked there, could provide help much more effectively and quickly in emergencies than total strangers.

Before a labour pool is set up, a number of issues need to be decided, among them desirable size of the organisation, whether to aim for homogeneous or heterogeneous membership and whether or not members should contribute as much labour to the pool as they draw out.
With regard to size, a large membership of, say, twenty or thirty farms would have considerable flexibility in matching labour surpluses of one farm with peak demands of another. Distances between farms would place a constraint on size. On the other hand, a small group would probably find it easier to reach agreement on contentious issues. Friendlier relationships within a smaller group could result in more frequent and flexible exchange of help and exploration of new avenues for group action.

Certain advantages might be gained by exploiting differences between farms. Livestock and arable farms have different seasonal labour requirements. Large farms may be undermanned while small family farms have labour surplus to requirements at certain times. If such farms could be brought together in a labour pool, there might be scope for using their labour resources more efficiently.

While in theory differences could be exploited, these same differences might stand in the way of establishing an effective group. Methods of working, standards of workmanship, rates of pay and even attitudes to work and time keeping might be so divergent as to drive cooperators apart. Standards might vary from livestock to arable farms or between large and small businesses. In short, potential benefits from pooling labour between dissimilar farms might be great but practical human problems of keeping the group together might be overwhelming. A labour pool would probably have a better chance of succeeding if members were similar in outlook and farms were homogeneous in size and type, but with peak labour demands staggered. If farms were similar, workers would probably be accustomed to much the same methods and standards of working, which would make it easier to transfer workers from one farm to another.

Some machinery rings work on the principle that each member puts into the ring roughly as much as he takes out in a given year. At the end of the accounting period, little cash changes hands, which simplifies the task of the organiser. There is no reason in theory why some members should not be net contributors and others net drawers from
a machinery or labour pool, provided supply and demand balance in aggregate. With some farmers net employers and others net employees, however, members become very sensitive to rates of payment. Similarly if labour is traded for a different kind of service, such as machinery use, exchange rates become more significant. The organiser of a group bringing together net lenders and net borrowers would have a diplomatic role to play.

Labour pooling seems a promising method of improving the flexibility of labour use, benefitting both the farm with a temporary labour surplus and the one in need of extra help. One of the main drawbacks is that labour supply cannot be guaranteed absolutely in advance. If, in a difficult season, labour peaks coincide on all farms, every member will want to draw on the pool at once and none will contribute. The larger the membership, the more varied members' farms and the more dissimilar their labour requirements, the greater the probability that demands could always be met. A small, homogeneous group, on the other hand, would be simpler to run and probably more rewarding to its members. Although the potential for exploiting inter-farm differences would be less, chances of survival could be rather better.

5.2.2 Joint provision of seasonal labour. Labour pooling makes use of regular labour already employed on members' farms. On occasion, however, additional labour has to be recruited to meet harvesting and other peak demands. Certain groups of workers have traditionally been associated with certain types of seasonal work. Migrant Irish workers and school children for potato picking in Scotland, East Enders hopping in Kent, gangs of van dwellers hoeing sugar beet in the Fens, shearing gangs in Australia and urban housewives picking fruit are familiar examples. Rising wages may, however, be eroding these time honoured traditions and forcing farmers to substitute mechanical harvesters for hand labour.
Not all seasonal tasks have been successfully mechanised. Some like fruit picking are still more satisfactorily performed by hand. There could be scope for a cooperative to recruit and supply seasonal labour. Since much time and effort is involved in locating workers in the first place, negotiating a rate for the job, arranging transport or accommodation and trying to retain workers once they have been engaged, a case could be made for a professional group organiser to undertake these tasks on behalf of all members. Workers might prefer a larger organisation since it might be able to guarantee continuity of employment, providing greater flexibility than individual farms. Against this is the argument that every farm in the group will need fruit pickers or sugar beet hoers on the same day.

An organisation which specialises in providing relief workers might be used to supply seasonal labour too. Yet workers who are capable of acting as farmer replacements are something of a luxury. A farmer wanting a few extra men at harvest or a gang of fruit pickers would scarcely require labour of this calibre. Other types of organisation would be more suitable to meet this need.

There is at least one example in Britain of a cooperative which exists to provide members with seasonal labour. During the Second World War, a prefabricated camp for five hundred prisoners-of-war was erected in the heart of an intensive fruit growing area. For some years after the war the Government ran a campaign to 'Lend a Hand on the Land.' Anyone interested in spending a holiday working on the land was given cheap travel, board and lodging for £2 a week in this or other similar camps and was paid normal agricultural rates for fruit picking, potato harvesting and other seasonal work. When the campaign was brought to an end, local farmers who relied heavily on seasonal labour formed a cooperative to purchase the camp. It is still run as an agricultural camp accommodating seasonal workers. In return for providing accommodation, the 100 to 150 members of the cooperative are entitled to a supply of labour to meet their seasonal requirements. It is estimated that about half the cooperative members still make use of the service in any one year (Worrall, 1976).
Most workers nowadays are students, a large proportion from overseas. The cooperative offers them a working holiday with the prospect of fruit picking or other seasonal work to cover costs of accommodation. Workers are paid current piece work rates by their employers, who also provide transport to and from the farm. The camp is open from mid-May to the end of October. Over the years the accommodation was upgraded to a brick built holiday camp with a heated outdoor swimming pool, tennis courts, a club and indoor recreation facilities. In the season it has a staff of twenty. Full board and lodging are provided, the charges in 1977 being £20 per week.

One of the main difficulties is to match labour supply with demand. Members of the cooperative are asked, months in advance, to estimate their requirements for casual labour for each week of the harvesting season. Staff of the cooperative then have the difficult task of trying to recruit the right number of workers to meet anticipated demands in each fortnightly period. Peak demand is for strawberry pickers between mid-June and mid-July but the crop is notoriously unpredictable as regards size and timing. If the crop is very heavy and labour demand exceeds the number of pickers in the camp, members are only allowed a proportion of their basic quota. If, as in the 1976 drought, the crop is light and the season very short, labour supply exceeds the work available. Pickers who are not earning may be obliged to leave the camp. The cooperative cannot guarantee employment to the students for specified weeks, although every effort is made to allocate work fairly. From mid-July onwards there is more variety of work. Local processing factories employ many casual workers in the height of the fruit picking season. They take about fifty workers from the camp, which helps the organisers to predict labour demand with a little more confidence.

An organisation like this has to be prepared to adapt to social and economic change. Demand for labour is likely to decline slowly over the years as more labour saving techniques are introduced. The camp is rarely filled to its capacity of five hundred nowadays. The nature of the labour supply is also changing. At one time the
majority of workers were from overseas but with current high levels of unemployment, the British Government is less willing to issue visas and work permits to foreign students. With inflation, too, costs of running the camp are soaring and this could threaten the future of the enterprise.

The task of matching an unknown supply of labour of uncertain quality to an unpredictable demand must be extremely difficult. By the nature of this particular operation, cost of the supplementary labour is reasonable. Flexibility and reliability cannot be guaranteed, although supply would be more reliable than a labour pool. The fact that the cooperative is still operating after more than twenty years is perhaps best evidence that it continues to meet a need. It seems unlikely that other schemes could be modelled on these lines. Development of this particular cooperative owes so much to the prior existence of the agricultural camp and the fact that local farmers had the foresight to buy it when the opportunity came their way.

5.2.3 Comparison of schemes to supply supplementary labour. Any form of labour pooling which makes use of slack resources instead of drawing in additional labour must be preferred on grounds of cost. In terms of flexibility, too, pooling probably achieves a better overall matching of labour supply and demand than a scheme to employ additional seasonal workers. The chief drawback of labour pooling is that when peaks of demand are highest, least labour will be put into the pool. Here a scheme for providing additional workers would seem to be preferable. Complete reliability (that is, a guarantee that seasonal labour will be available on demand) could only be achieved by holding a large force of unoccupied workers in reserve against the occasional difficult season. For best results, the two types of scheme might be run in conjunction with one another. The same organiser could run a labour pool and also recruit some additional workers for peak periods.
5.3 Providing workers with extra skills

The discussions in sections 5.1 and 5.2 above were concerned with demands for farm skilled labour. There are many occasions, however, when a farmer needs to consult or employ an expert who has other skills. Outside contractors are often engaged for major building and construction projects (situation g in Table 5). Seasonal operations like harvesting, ditching or drainage may be carried out by farm skilled staff but where tasks involve operation of machinery which the farm does not own, they have been included in category (h). Experts may also be needed in emergencies (situation i).

As with other types of labour demand, existing commercial or informal arrangements for obtaining expert assistance may be perfectly adequate. Cooperative solutions might be worth considering if for any reason existing arrangements broke down. Sources of specialist skill might become unavailable, unreliable or uneconomic. They might be unable to cope with new demands. Another reason for group action might be to utilise spare capacity in the farm labour force or to make use of latent skills. The idea of a group of farmers employing a mechanic, for example, might be sparked off by the retirement of the village blacksmith, rising costs, long delays or unsatisfactory service from commercial engineers, formation of a machinery syndicate or the fact that a skilled mechanic already employed by one farm in the group was not fully occupied.

Four possibilities are considered in this section:

- groups employing an expert
- group workshops
- machinery and labour teams
- members of a group acquiring extra skills themselves.

In common with other types of labour sharing scheme, the ideals are flexibility, meaning that the expert is neither under employed nor over stretched, reliability and economy. Among the qualities sought in the expert, skill and experience are of course essential but other characteristics may be equally important. Unlike
the replacement or supplementary worker, the expert possesses skills which the farmer probably does not share, so the expert cannot count on guidance from the employer. He may often be working on his own in the position of a self employed person. He may have to develop his work role in the group. A sense of responsibility, maturity and independence, power to motivate himself and set his own targets, ability to organise his time, initiative and ability to improvise, would be desirable qualities in an expert employed by a farmers' group.

5.3.1 Groups employing an expert. A group of farmers might employ an expert to provide skills which they all needed from time to time. This type of arrangement is most appropriate for a professional worker, someone with sufficient breadth of skill to keep him fully occupied and with initiative to develop his own role in the group. The specialist might be engaged for an initial period of, say, two years, on a fixed salary raised by levy on the members. If the specialist wanted the arrangement to continue, it would be up to him to stimulate enough demand for his services.

Arrangements of this type are not uncommon in agriculture. One general purpose cooperative with about three hundred members, mainly arable farmers, has employed an agricultural adviser to give free advice on fertilisers. Apart from the obvious benefit for the cooperative that members will be likely to purchase their fertiliser through the organisation, the giving of a service makes the cooperative appear more personal to members, enhancing their sense of loyalty and identity with the organisation.

In Western Australia during the 1960s the Department of Agriculture encouraged farmers to form small discussion groups which met regularly under the guidance of local agricultural advisers. Later a number of these advisers left the Government service to set up as private farm management consultants. Members of discussion groups often became their clients, sometimes remaining together as groups. Much of the early development of group farming in Australia resulted from private farm consultants working intensively with small discussion groups.
Nearer home is the example of the 'A' type of agricultural training group. There were thirty-five such groups in England in March 1977 (Agricultural Training Board, 1977). An 'A' group employs a resident training officer full time or part time and pays part of his salary, the rest being met by the Agricultural Training Board. The training officer, who may have a background in education, industrial training, personnel management or agriculture, will have undergone eight or nine weeks training. He is expected to organise an agreed programme of training courses as requested by group members. Other duties may include preparing individual training programmes at the place of work, visiting apprentices and helping the group to develop new activities.

A group with a full time training officer needs to cover four or five hundred 'trainable people' to be economically viable. If there is insufficient work to justify employing one training officer full time, he may combine training with some other work for the group or he may act as a part time training officer to several smaller groups. The same principle could be applied in other types of group.

In each example described above, the specialist has considerable scope to develop his role with the group and success of the scheme depends largely on him. Another variant would be along the lines of the relief milker who visits each farm in a group in turn. The travelling farm secretary and the milk recorder are examples. Here the role of the specialist is much more circumscribed and there is not the same opportunity to develop new activities through discussion with the group.

Arrangements where a group employs a specialist are best suited to situation (g), those tasks which are predictable and can be performed at any convenient time. The specialist would also be near at hand to meet emergencies in category (i), the resident vet. being an obvious example. Supply of expert advice would be wholly predictable.
and reliable, the quality of service depending largely on the abilities and personality of the expert and his relationship with the group. It is difficult to generalise about costs and benefits of such schemes. The type of farmer to join would probably be one who was looking for longer term development of his farm business rather than an immediate cash return or a saving in current costs.

5.3.2 **Joint workshops.** A skilled mechanic employed by a group could repair and maintain farm machinery and plant, meeting routine, seasonal and emergency demands (situations g, h and i). Arrangements to share services of a fitter and use of a workshop have developed along various lines depending on individual circumstances and historical accidents.

One machinery syndicate in the eastern counties has 'first call' on the services of a self employed mechanic with his own workshop and therefore has no need of a group mechanic. Another syndicate pays the chairman for the services of his full time fitter and use of workshop for work on group owned machines. This same group is thinking of employing an apprentice mechanic who will attend day release, learn from the chairman's mechanic and gain experience on the wide range of machines used by the group. It is hoped that he may choose to remain with the group when he has qualified. Another example is of a vegetable-growing cooperative which started as a pea group. Originally the farm foreman serviced the pea viner in his spare time. As the syndicate's stock of machinery has grown, so has demand for a mechanic. Today the same group employs three fitters full time just to service group owned machinery and plant.

In each of the examples quoted above, group members have access to a workshop on one of the farms. A further development is to take the workshop from farm to farm. The following example comes from South Australia. One of the members of a machinery syndicate employs a mechanic who is loaned to the group. Originally he used workshops on members' farms. Recently the group has equipped a truck as a mobile workshop with basic tools, spares, fuel, oil, welding equipment and so
The workshop can tour farms and go to breakdowns in the field. The group intends to install two-way radio in the workshop which will be powerful enough to reach all farms in the group.

Among practical problems which the group encountered, buying and equipping the workshop was not cheap. The mobile workshop necessarily carries duplicates of stock already held on members' farms. With the mechanic constantly on the move, it is difficult to keep track of individual tools. Another vital question is whether the group mechanic and group facilities are to be used exclusively for group owned machinery and plant. Under what circumstances should members be allowed to use the service for their own needs?

A supply cooperative in Britain has instituted a fitter scheme on rather different lines. Twelve members of the parent cooperative have been helped to form a group and employ a fitter expressly to look after individually owned machines. The group is not a machinery syndicate and owns no items jointly. The fitter visits their farms with a mobile workshop and equipment. As in the case of a group employing an agricultural adviser, this cooperative believes that by providing its members with a service, it will develop a sense of group identity and enhance loyalty to the parent organisation.

Despite some practical problems, farmers participating in schemes like these have claimed that the fitter or mechanic pays for himself many times over in terms of longer life and fewer breakdowns of farm machinery. In every case quoted above, members have expressed satisfaction with the flexibility, reliability, quality and cost of the service.

5.3.3 Specialised machinery and labour teams. One of the demands identified in Table 5 was for skilled operators of machinery which is not owned by the farm (situation h). Sharing a specialist operator follows naturally from syndication of large and complex pieces of machinery. In order to safeguard the machine and get the best per-
formance from it, it is advisable for the same man to operate it on all farms. Ideally he would have attended a training course for operators and he would be the only person allowed to drive the machine. Syndicate members would pay his employer for his time.

Extending this principle, not just one operator but a whole team could be seconded to a group harvesting operation. Each man would be paid at an agreed rate for man hours contributed to the group. Members of the team could be trained in advance. Economies of scale might arise through having the same team working together continuously and development of team spirit could boost labour productivity still further.

One pea harvesting group has two teams of men working alternate shifts. Each team consists of a director, a machinery manager, four cutter operators, eight viner operators, four or five lorry drivers and a fitter. Members of the team can be drawn from any farm in the group and work on any farm (Burston, 1977).

More elaborate examples can be cited too. Members of one pea group in East Anglia formed a group to grow carrots. In the first year of operation they grew carrots individually, harvesting and grading them jointly but marketing separately. This was not entirely satisfactory. The next year they grew carrots under contract to the group which took over an established crop to harvest and market it. Workers were still under the direction of their own employers. The final development was for the group to assume entire control of growing and marketing carrots, including control of the workforce. Each member now lends workers to the carrot group for the six month carrot growing season. Workers are paid on the same basis as before by their employers but are answerable to the carrot manager. Using group owned machinery, the ten-man team tours farms in turn, drilling, cultivating, harvesting carrots and transporting them to the packhouse. A few seasonal workers are also hired by the group for harvesting, packing and grading carrots and a marketing manager is responsible for selling them.
Another cooperative has developed the carrot operation on somewhat different lines, removing it still further from members' control. In this example, farmers do not rent labour to the carrot group but only suitable land. A production manager is entirely responsible for the crop, from drilling to packing and a marketing manager takes over at that point. Farmers cultivate their own land, under supervision from the production manager but from that time the carrot team takes control. The seven men in the team are permanently employed by the cooperative; in this case the carrot operation continues all year round.

In each case described above, specialised machinery and expertise are provided by the group, land by individuals. The three schemes differ in the way labour is provided and used. In the pea group and the first carrot group, members provide most of the team but no longer direct it; with the pea group, workers are loaned for a matter of weeks, in the second for six months. In the last example labour is both employed and directed by the group.

5.3.4 Acquiring extra skills. A group of farmers can employ a specialist like a mechanic or a farm adviser who possesses some skill or expertise they all need. Alternatively, group members themselves could acquire useful extra skills and make them available to the group. As pointed out in Chapter 2, there are farmers and farm family workers from small farms who need supplementary employment but not full time. Many make use of their farm skills by agricultural contracting on other holdings. In some parts of the country today, supply of agricultural contractors exceeds demand and rates have been forced down to an uneconomic level. The more skills a worker possesses, the less necessary it is that he should ever be unemployed. Therefore a case can be made for farm family workers to acquire extra skills. These skills could be made available to a labour pool in the same way as surplus farm skilled labour.
In West Germany and the Netherlands, machinery rings facilitate exchange of machinery which farmers already own. Ideally as the ring develops, members consult with the organiser before buying new equipment. By analogy, labour pools could begin by sharing skills which members already possess. Later, members might deliberately set out to acquire new skills which were generally in demand but lacking in the group. As pointed out in section 5.1.1 above, relief workers in Dutch labour cooperatives are trained in a number of extra skills such as routine veterinary work and building construction. When not needed for emergency relief work, they can be employed on other tasks. Hill, Morley, Middleton and Shorney quoted one example of relief workers with some help from regular farm staff putting up a cowshed for eighty cows.

The Agricultural Training Board provides courses in 'extra' skills such as machinery maintenance, building construction and electrical wiring, to advanced levels. An agricultural training group might provide an appropriate basis for a labour pool or a relief labour cooperative. Besides helping members to acquire and upgrade skills, it has a training officer or organiser who might be prepared to administer such a scheme. Through the activities of the group, methods of working are standardised, which would be necessary for a labour pool. Farmers and workers come to know one another better by attending courses on one another's farms. Word of who is needing some additional help and who has labour to spare, could easily be communicated through the group. Then farmers who join tend to be more progressive than most and to have demonstrated their willingness to join forces with others to solve labour problems. All these characteristics would be relevant to development of a labour sharing scheme.

5.3.5 Summary of methods of providing extra skills. The schemes described in this section are designed to meet such different needs that it is hardly meaningful to compare them. The last mentioned, making use of existing spare capacity in members' farms, ought to be least expensive but range and quality of skills offered would perhaps be limited. Employing a specialist full time for a small group would be
expensive but could provide a high quality, reliable service. A choice can only be made in the light of needs of the particular group.

One general consideration about labour sharing schemes concerns the feelings of workers. It could prove more difficult to convince employees of the value of labour sharing than their employers. Accustomed to having responsibility for work on their own farms, workers might resist the idea of other employees being brought in. Farm foremen in particular are likely to resent any changes which appear to undermine their authority.

Farmers with experience of schemes described in this chapter have found that most workers, once they have had some experience of working in a group, enjoy the companionship of other workers, the stimulus of working in unfamiliar surroundings and the challenge of being part of a team. An element of competition between workers from different farms can improve the quantity and quality of output. Workers employed by Glenteviot Farmers, a partially integrated group in the Borders, were found to appreciate the experience of working on other farms as members of a team and learning new methods. Operating new and larger machines was a source of satisfaction to the men, as was additional overtime and payment of expenses for travelling between farms. Some wives were unhappy to have their husbands working away from home until they became used to it. A few workers are 'loners' and prefer not to be part of a team, a small but vital consideration to any group organiser (Dick, 1977; Powell, 1976; Read, 1977).

The aim of this chapter has been to suggest various ways in which group action might be adapted to solve particular types of labour shortage on farms. The following chapter considers the case for developing group activities further.
6. EXTENDING GROUP ACTIVITIES

'Cooperation is not something a farmer thinks of naturally; it usually has to be put to him. If one shows him the benefits of cooperation in one specific instance, he may (or may not) accept it, and take action. What he hardly ever does however is to think consciously of exploring the possibilities of cooperation; each cooperative venture remains a thing in itself, and does not lead naturally to others (Produce Studies Ltd., 1966).

Many farmers in Britain are partially involved in agricultural cooperation but few are totally involved. Typically they join forces in one farm enterprise but not another and within enterprises, cooperate in some activities but not others. In their survey of machinery syndicates in England and Wales, for instance, Gardiner and Gill (1964) found that three-quarters of members belonged to only one syndicate and that two-thirds of syndicates operated only one machine. This chapter considers some of the reasons why cooperation in one activity could and should lead to other group activities. Cooperation in labour use is just one element in a logical sequence; it is unlikely to be either the first or the last link in the chain.

6.1 Reasons for extending group action

One reason for extending group activities would be to use spare capacity and exploit new opportunities. Where a large syndicated machine, an expert employed by a group or a machinery and labour team is not fully occupied on members' farms, there may be scope for the group to do contract work on other farms. Alternatively the group itself might acquire extra land which would be farmed jointly, using shared labour and equipment.

Group activities intended to meet anticipated peaks in labour demand might be extended to cover emergencies (situations f and i in Table 5). Section 5.2.1 suggested that farmers and workers who are familiar with the layout of neighbouring farms through having worked
there regularly could give help in emergencies much more rapidly and effectively than total strangers. This security aspect has been stressed by members of integrated group farms. Members of A.1 Farmers, for instance, consider security and support of mutual aid to be one of the prime advantages of group membership (Powell, 1976). Glen-teviot Farmers have an unwritten rule that if death or disaster were to face a member, others would rally round to help (Dick, 1977). Similar views have been expressed by members of fully integrated group farms in Victoria, Australia (Kennedy, 1977). Greater security may lead to a more dynamic attitude among partners, inducing them to take certain risks they would not have dared to take alone (OECD, 1971).

Group activities bring farmers together. While meeting in connection with one activity they will naturally discuss other farming problems, which may in turn suggest further group action. Discussion groups in particular lend themselves to this type of development. Members of a training group, too, meeting to decide on the training programme for the forthcoming season, might discuss labour shortages. From there it would be a short step to consider pooling labour or setting up a relief labour cooperative. One cooperative organisation might act as an umbrella under which other group activities could develop. A labour pool might use the existing membership, organisation and network of a machinery syndicate or a training group, for instance. Section 5.3.2 cited the requisite supply cooperative which acted as an umbrella for the development of a joint workshop.

While cooperation in isolated farm activities brings certain benefits, it may introduce new problems as well. A farmer operating independently with his own machine, for example, plans his programme of work according to technical considerations like the weather and state of the crops. When several farmers join forces to purchase and share a machine, they may enjoy certain advantages over the single operator, such as lower capital investment, reduced operating costs, more up-to-date technology, savings of labour or more timely operations. As a price for these advantages they may have to sacrifice freedom to
choose when to use the machine. The syndicate may decide that a rota is the fairest way of allocating the machine. This could mean that considerations of social justice outweigh technical considerations, with some loss of output resulting.

One way of overcoming this type of problem would be for members to agree on a joint cropping plan, growing between them a sequence of early and late crops in order to extend the harvesting period. A more radical solution would be for one member of the syndicate, or a manager employed by the group, to be made responsible for harvesting the crop on all farms. He would decide the order of precedence according to the state of crops, regardless of whose land it was. He might use a team of workers drawn from all group farms. Further developments might be for the team to assume control of the entire operation of growing as well as harvesting the crop and for returns to be pooled. The two carrot groups described in section 5.3.3 operated along these lines. Problems inherent in partial cooperation may therefore be overcome by further integration of farming activities.

Arguments in favour of extending activities of existing groups, which have been touched on here, are well covered in two reports from Produce Studies Ltd. (1966 and 1968). As these reports point out, group development is a time consuming business. Hours devoted to discussion and planning do not pay off immediately. Indeed, the outcome of lengthy deliberations may be the realisation that development would not be in the best interests of the group. For a group composed of full time farmers, time may be the main constraint on development. A group interested in expansion may therefore need to appoint a development officer, a salaried employee of the group, whose role is to explore the scope for new group activities.

Several examples have been cited of cooperation in labour use developing from other group activities. Machinery syndicates and training groups provide particularly fertile ground for cultivating new forms of labour sharing. Syndication of machinery generates the need for skilled
operators of machinery, group mechanics and teams of supplementary workers. Agricultural training groups lend themselves to pooling of under utilised labour, upgrading of skills and development of non-farm skills which can also be pooled. Marketing groups can lead to syndication of harvesters and eventually to a specialised team growing, harvesting and marketing a crop on behalf of all members. Economies of scale gained through using larger machines and labour specialisation give a group spare capacity which could be devoted to farming extra land which the group rents or buys.

Pickard, while in favour of extension of simple forms of cooperation into marketing and production, warns that buying groups may not be suitable launching pads. As he points out, any group of farmers which has the necessary characteristics to be able to cooperate for production can easily market together and any group capable of marketing together can buy together. Unfortunately the reverse is far from true. Members of a buying group may be scattered over a wide area, have incompatible farming programmes and be quite unprepared to make the much greater sacrifices of independence demanded by cooperative marketing or production (Pickard, 1970).

6.2 New activities for training groups

6.2.1 Labour sharing schemes. In the course of the training group survey, group chairmen and organisers were asked if the group had considered extending its activities beyond the training of farmers and workers. One Lincolnshire group, formed from a pea group, was already employing a mechanic to service members' tractors. It was among the smaller, close knit Welsh groups, however, that most serious consideration had been given to the idea of pooling labour or setting up relief labour cooperatives. Several group representatives had been to a meeting to hear about relief labour cooperatives in the Netherlands and had come home to give the matter serious thought. They raised a number of practical questions about how relief schemes would be organised, how relief workers would be selected, where they would live and whether small farmers in Wales would be able to afford to employ them, even for short periods.
A more fundamental question was whether there was really a need for organised labour sharing in Wales. Farming communities have a long tradition of neighbourly help. Until twenty or thirty years ago it was usual for farmers to join forces with their neighbours for labour intensive tasks such as shearing, haymaking and harvesting. Most of the people interviewed had taken part in these communal activities and spoke nostalgically of the old days. Nowadays farm staffs are smaller, fewer farmers employ regular labour outside the family and mechanisation has removed the need for large gangs of workers. The tradition of communal work has declined but not entirely disappeared.

With the emergence of one-man farms there is a growing need for relief services (situation c). Opinions differed as to whether the neighbourly tradition was weaker or stronger than in the past but it is clearly still a force to be reckoned with. Training group chairmen and organisers in Wales had little doubt that in an emergency, neighbours would rally round to help a fellow farmer. Close kinship networks mean that many Welsh farmers can count on the support of farming relatives, too, in times of need. Some group spokesmen concluded that there was no need for formally organised relief services in close knit Welsh farming communities.

Other group representatives, perhaps more far sighted, had some reservations about informal aid. They agreed that if a dairy farmer were taken ill or met with an accident, relatives and neighbours would rally round immediately with offers of help. They were not sure how long this help would be sustained. Increasingly, they felt, Welsh farmers were obliged to place a value on their time and to reckon the cost of hours they gave to help a neighbour in trouble. In a future, more commercialised Welsh agriculture, it was felt, organised relief services might have a place, at least to take over from 'community first aid.'
An entire training group might form a relief labour cooperative of the 'insurance' type, with the training organiser to run it. The fact of the relief worker being well known to members would be an asset at times of crisis. Working for a known, small, local group might make the job more attractive to the relief worker too. A training group could also be a source of relief workers. Through the group, workers acquire and improve skills. Where farmers and workers attend courses together, farmers have an opportunity to assess workers' ability. Relief work would be a valuable training for a young worker and he might eventually attain a permanent position on a farm in the group.

With the passing of old traditions, some group representatives felt that the most pressing need was for an extra pair of hands at busy times (situation e). Most Welsh farming communities seemed to have a farmer's son or ex-farm worker ready to meet this need. There was a case for small numbers of farmers banding together to employ relief workers for busy periods. It was felt that training groups could encourage such developments to grow from the grass roots but that the training group as a whole should not be involved.

Some Welsh groups had scope for pooling labour. Within groups there were many small family farms where a farmer's son was acquiring a range of useful skills through the training group but was unable to utilise those skills fully at home. At the same time, other farmers needed extra help. Although a certain amount of informal pooling goes on, training groups could develop this on a more regular and predictable basis, to meet demands under (d) and (e). A training group organiser might be willing to act as organiser for the pool, putting farms and workers in touch. It would be desirable to standardise methods of working and rates of pay in the pool. Group training would help towards the former and might indirectly influence the latter.
6.2.2 Selection and placement of new entrants. Training groups included in the survey from eastern England, where farm businesses are larger and more labour is employed, saw scope for developing labour cooperation in other directions.

In order to improve the calibre of new entrants to farming, some training groups employing large numbers of workers had embarked on programmes to promote agricultural careers for school leavers. Their activities had included producing attractive brochures aimed at the school leaver, group members giving talks in schools and at careers conventions, taking parties of school children or careers advisers round group farms. Having interested young people in the possibility of a career in agriculture, the next step would be to help them find jobs. Two training groups in the sample had offered firm numbers of training places to new entrants each year. Several training officers had made contact with the Careers Service and were helping to place school leavers on group farms. One training officer was giving the local Job Centre notice of vacancies on farms in the group and in exchange, the Centre was undertaking to provide employers with lists of genuine, selected applicants if they needed labour. This was a welcome development since previously, the Job Centre had not bothered to screen applicants for farm work. Another group of large employers, inundated with requests for temporary employment from pre-college and sandwich course students, was considering making the training officer responsible for screening all applicants and selecting the best.

A reaction of groups involved in selection and placement of new entrants was that promotion campaigns in schools had been too successful. At a time of high unemployment among school leavers, response had been overwhelming. It was impossible to find jobs for all those expressing genuine interest. Besides this, high unemployment outside agriculture meant that turnover among established farm staffs was lower than anticipated, resulting in fewer vacancies for new entrants. Group activities like these could nevertheless have a role in developing agriculture's labour resources at a time of fuller employment.
6.2.3 **Apprentice training.** Following through the objective of recruiting, selecting and training new entrants to the industry, supervision of apprentices could be brought within a group training programme. Training officers are normally responsible for visiting and supervising apprentices employed on farms within their group and some also have responsibilities outside the group. One training group in the sample was moving trainees from farm to farm within the group in the course of their three year apprenticeship. This provided valuable experience, not only of different farming methods but also of different employment conditions. A further step might be for the training group as a whole to recruit, train and employ new entrants. While this idea had been mooted in a few groups, most farmers were reluctant, feeling that apprentices ought not to have more than one employer at a time.

6.2.4 **Ladder of promotion.** One of the drawbacks of agricultural employment is that few farms employ many workers, so there are rarely opportunities for keen men to gain promotion with the same employer. Farmers therefore risk losing their most promising workers because they cannot promote them. A training group, on the other hand, would be large enough to provide a career ladder for good workers. A group which has helped to improve workers' skills, ought to be able to retain those workers and benefit from their skills if they wish to stay.

One training group visited had explored the possibility of making the training officer a point of contact, a clearing house for information about job vacancies and prospects. Any worker in the group who wanted to change his job would be encouraged to notify the training officer, who would likewise be kept informed of vacancies arising on group farms. With his personal knowledge of employers and employees the training officer would be in a good position to recommend workers for jobs and vice versa.
6.2.5 Accommodation for young workers. Finding places for school leavers, pre-college students and sandwich course students in agriculture is a growing problem. Often the difficulty is lack of suitable accommodation. More school leavers from towns and fewer from rural areas are being attracted into agriculture and therefore having to live away from home. Added to this, fewer farmers' wives and farm workers' wives nowadays are prepared to provide board and lodging for young workers.

One solution is to provide hostel accommodation for young workers. Since few farms employ enough young workers to justify a hostel on their own, there might be scope for a group such as a training group to provide a joint hostel. One training group in the survey had seriously discussed the possibility. During the recession, members were finding they could recruit enough new workers from among job applicants living nearby. Thus the hostel idea had been shelved, possibly to be revived at some future date. Another group had rejected the idea after some debate because farms in the group were scattered over a whole county so that a central hostel would not have been very practical. A hostel is probably most suitable for farms close together employing many workers, which suggests horticulture or intensive livestock production.

A joint hostel has been operating for some years in Yorkshire. A group of sixteen farmers joined forces to buy an old public house and convert it into accommodation for a dozen single workers. The cooperative owns the house, employs a housekeeper and pays for food, heat, lighting, maintenance and rates. Residents, who are employed by individual farmers and not by the group, pay the amount agreed by the Agricultural Wages Board for board and lodging. The aim is not to make a profit but to cover costs and this has been achieved in most years.

Originally the hostel was intended for single men permanently employed on local farms. Needs change with the times and today the ten or so young people in the hostel are sandwich course students from local agricultural colleges. Farmers in the area who were pre-
viously reluctant to take student labour, are now able to do so. An added advantage is that students from two different colleges mix and exchange ideas, to everyone's benefit (Mitchell, 1977).

6.3 Part time farming

Where family farming predominates, the family developmental cycle has a considerable influence on labour available to operate farm businesses, as pointed out in section 2.4. During the middle phase of the cycle, with children of working age available to work on the family holding, labour supply is liable to exceed demand. In the later phase when children have left home, the ageing farmer may find it increasingly difficult to manage farm work. He may look for a way of reducing the physical burden of work without being in a position to employ another person full time and still being reluctant to give up the holding.

Various forms of group farming have evolved to meet such needs. In Spain, for example, it is common to find elderly farmers without heirs struggling to operate their farms because they are unwilling to sell their land. Group farming provides a solution (Bueno, 1977). Elderly farmers lease land to the local group but no longer work it. Younger and more energetic farmers with too little land to keep them fully occupied at home, have the opportunity to cultivate additional land as employees of the group. For the young, ambitious farmer, working for the group is a way of gaining experience and accumulating some capital to build up a farm business.

Production teams in Poland, too, bring together farmers in different stages of the family developmental cycle (Klodzinski, 1976). Agripools in Saskatchewan perform a similar function. Here, not only elderly farmers nearing retirement but also younger men with non-viable holdings, pool their land. Those of working age are then free to take non-farm jobs without relinquishing their land or their homes, secure in the knowledge that essential farm tasks are being carried out efficiently in their absence. Since land is leased and not sold to the group, non-active owners are able to benefit from appreciation
in land values. They may contemplate returning to full time farming at some later date. The Velcourt farming system operating in Britain and Australia has a similar effect (Powell, Gasson and Bartholomaeus, 1979). In Japan, too, where holdings tend to be very small, a large proportion of all farmers has off-farm work. Here group farming ensures that essential agricultural work is carried out while farm owners are occupied elsewhere (OECD, 1971).

6.4 Farm tourism

So far, discussion has focused on the scope for group action in training, development and employment of labour in farm production. Opportunities might also occur for cooperation in peripheral activities which are not strictly farm production, which nevertheless make a significant contribution to farm family income. One possibility is for group action to promote farm tourism, an enterprise of growing importance on many farms. Information from Merionethshire suggests that twelve per cent of all farm families provide bed and breakfast accommodation for holiday visitors while no less than eleven per cent of total net income of farm families in the Scottish Highlands and Islands is estimated to come from farm tourism (Denman, 1979). If cooperation could improve labour productivity in this field, it could make a worthwhile contribution to farm family income. This would be likely to involve farmers’ wives more than farmers or farm workers.

One example is the 'Peak Moorlands Farm Holidays' group, recently formed in the Staffordshire/Derbyshire area (Brassington, 1979). Initiative came from the ADAS Regional Socio-Economic Adviser. He approached a number of farm families in the area with the idea of developing farm tourism to supplement farm incomes. Response was good and a dozen families agreed to form a group to promote farm holidays in the area. Several were already providing farmhouse bed and breakfast, caravans, self catering accommodation or full board for holiday visitors. Facilities for pony trekking, angling, hang gliding and other outdoor activities were also to be found in the district.
While members continue to run their own businesses, the group has helped them promote their enterprises more effectively. Links have been established with ADAS, the Peak Park Planning Board and the Tourist Board, organisations which can help by advising the group of opportunities and new developments in the region. A grant from the Tourist Board in the first year helped the group produce a brochure advertising accommodation. Although members now finance publication themselves, the Tourist Board continues to distribute publicity material for them. Besides making visitors aware that there is a choice of accommodation available in the area, the group network helps to balance supply and demand by directing visitors to another farmhouse in the group if one is full. While the main function of the organisation is to publicise farmhouse holidays, it helps in other ways too. The group as a whole encourages members to maintain a high standard of accommodation and advises on ways of upgrading facilities. Discussion of practical business problems in the group is also helpful to members and often produces solutions.
7. THEORY OF GROUP ACTION

Up to now this study has been concerned with cooperation as a means of solving various labour problems in agriculture. In this chapter the focus switches to cooperation itself. The aim is to identify factors which make for successful group action. Following discussion of what a group is, a simple model of group action is described. Aspects of group structure are considered in relation to this model. The final chapter attempts to apply some theoretical conclusions from this chapter to practical questions of forming labour cooperatives and groups in British agriculture.

7.1 What is a group?

A group is more than a collection of individuals. One definition is 'a set of members who mutually perceive themselves to be cooperatively interdependent.' In the first place this definition implies that members identify with the group; that is to say, they must be consciously aware of their membership and must place a value on it if they are to continue supporting the group. A collection of individuals thrown together by events might be dependent upon one another without realising it. They would not constitute a group in the present sense.

The essence of a group is not similarity of members nor bonds of affection between them but their cooperative relationship. In Chapter 4 a distinction was drawn between formal cooperation and helpfulness. This study is confined to formal groups and cooperatives. Although formal groups may grow out of informal friendship cliques or groups sharing a common fate, there are important differences. Formal groups are deliberately created in order to achieve specified goals. Structure and organisation are geared towards attaining those goals. Members are formally committed to the group for a specified period of time and its rules are legally binding. Informal groups may or may not develop a stable structure but goals remain vague and unstated. There is no legal commitment to participate or to abide by group rules.
Most groups considered in this study are small groups. A small group is made up of any number of persons who interact with one another on a personal, face-to-face basis. A minimum requirement would be that at some later date, any member could recall that each of the others had been present. The lower limit for a small group is, of course, two persons. While there is no hard and fast upper limit, in practice twenty would be a maximum. The number of possible face-to-face relationships increases in geometrical progression with group size. If a group has n members, the number of possible pair relationships is given by

\[ \frac{n^2 - n}{2} \]

In a group of three there are three two-way channels of communication, with ten members forty-five such relationships and with twenty members, one hundred and ninety. The number of pair relationships between twenty people is so cumbersome that small cliques are likely to be formed. In practice it is found that many farm production groups and syndicates have only two or three members, the majority less than ten.

Small groups are thought to differ in kind as well as in size from large groups (Olson, 1965). In small groups, actions of one individual can have a noticeable effect on costs and benefits of others while in a large group, no single contributor can make a perceptible difference to the group as a whole. Desire to join forces is, or can be, spontaneous whereas large groups only come into existence through external inducement or compulsion. Machinery syndicates and farm production groups are typically small groups in this sense while producer marketing boards are examples of large groups.

7.2 Model of group action

People take trouble to form groups because they believe they will be able to achieve something together which cannot be achieved individually or that they will be able to achieve it more effectively. Advantages which a farm production group hopes to gain might be lower
costs or higher output, a better quality product, secure markets, a saving of labour, higher labour productivity, more timely operations. If a group achieves more than any member could have done on his own or more than individual efforts combined, it has gained a **group bonus**. If the goal of a forage group were to make more silage, for example, a group bonus would be achieved if total tonnage made by the group exceeded the sum of what each member would have made on his own. Although a group has potential to produce more in assembly than separately, a group bonus is not automatically awarded to every collection of individuals who decide to work together. The following model, based on one put forward by Collins and Guetzkow (1964) tries to explain why this should be so.

The group environment can be visualised as composed of two distinct but connected systems. One is the **task environment** made up of stimuli, obstacles and rewards which are external to participants and the other the **human environment** of interpersonal stimuli, obstacles and rewards. The secret of successful group action is to strike the right balance between accomplishing the group task and satisfying human needs of members.

For illustration, consider first an individual working alone at a task; a farmer making silage single handed. In this activity he is faced with problems arising from the task itself such as stage of growth of the crop, weather conditions and mechanical breakdowns. His productivity (tons made in a day) will depend on his ability to overcome obstacles in the task environment. While task obstacles may limit his productivity severely, they are nevertheless the only set of problems he encounters.

Consider now three neighbouring farmers who decide to form a forage syndicate. It is a formal group with a legal constitution and they agree to commit themselves for a minimum of two years. Each farmer was previously making silage on his own. By replacing their old machinery with one set of modern equipment of larger capacity, they hope to avoid frequent breakdowns and cover more acres in a day. Having three on the job instead of one should also give them more time.
With the hours saved, members intend to make an extra cut of silage on each farm, anticipating a group bonus of more silage.

While the solitary worker only had to contend with problems in the task environment, the group has to cope with the task and also problems arising in the human environment, that is to say, difficulties caused by the presence and behaviour of others. Four sources of friction can be identified.

(a) Obstacles in the task environment influence productivity of group members as much as of individuals working alone; rain falls on the group as surely as on the solitary farmer.

(b) Problems caused by the presence of others may affect individual productivity, even where a person continues to work unaided. Having an audience may spur workers on to greater efforts, increasing productivity, or it may inhibit them because they are afraid of making a mistake in public. While these effects wear off in a short time, in the longer run the presence of others is distracting and thus reduces productivity.

(c) Having several people cooperating on a job raises a new set of problems not affecting the individual worker. Major decisions, such as when to replace a machine, have to be taken jointly. Day-to-day decisions, such as which field to cut first and when to start, have to be communicated to other members of the work team. Failure to communicate is a sure way of undermining team spirit. Without effective communication there is no group bonus.

(d) Problems arising from behaviour of others may also limit the size of group bonus. If members of a forage group cannot agree whose field to cut first, the task is delayed. The group might even fall apart at a crucial time, forcing members to make other arrangements for silage making. At worst, not only is there no group bonus but failure to overcome human problems detracts from individual performance so that members achieve less together than they would have done working on their own.
Therefore, while productivity of a group is potentially greater than that of individuals, a group does not automatically perform better. It may even do worse. A group differs from an individual in having to consider the human environment and it is its success in overcoming human problems which determines the size of group bonus. A group has to build up a network of personal relationships, channels of communication and procedures for reaching agreement, capable of handling problems imposed by the task and smoothing out difficulties caused by members themselves. This can be called the human network of the group.

Since the two systems, task environment and human environment, are dynamically related, too much activity in one means less activity in the other. Time given to solving human problems is time lost for the group task and vice versa. This is fundamental to the logic of the model. Yet clearly the group cannot afford to neglect either. Failure to maintain an effective human network can undermine the group effort as surely as failure to achieve the task. The art of group action is to achieve the right balance between human and task activities for the group in question.

Group action brings rewards which can be divided into task rewards and human rewards. Task rewards are directly related to productivity. In the forage group, for example, task rewards would be tons of silage made. Solitary workers receive only task rewards but group members may also derive human rewards like comradeship, esteem or sympathy. Human and task rewards, like activities, are dynamically linked. Successful completion of a group task brings tangible rewards but may also be reflected in higher morale and more friendliness among members. Warm human relationships are rewarding in themselves but may also encourage more communication and sharing of responsibilities in the group, which in turn helps the task. As Rees (1950) put it, from his contact with his neighbours the individual Welsh farmer derives both companionship and assistance, but these are really aspects of a single relationship. Offers of help arise naturally from companionship and conversely, cooperation promotes the growth of companionship.
Human rewards help to hold a group together if for some reason task rewards are not forthcoming. Task rewards may not be realised until long after the task is completed whereas human rewards are experienced instantly. Tangible benefits of making silage in May, for instance, might not be felt until next January's milk cheque or even the following April's feed bill. The decision to operate as a group could have been taken many months before silage making started. During the interval, members reassure one another that they made the right decision; this is a human reward. Many social systems would be unworkable if they had to rely on task rewards to motivate members. Yet although human rewards can compensate for task rewards and vice versa, it is inadvisable to let the two systems diverge too far. If there is too much good fellowship in a group, dissatisfaction may follow because the task has been neglected. On the other hand, excessive devotion to the task which denies members opportunities to interact and develop satisfying personal relationships may be equally self-defeating. Once the immediate goal has been achieved there is nothing to hold members together, no fund of goodwill to tide them over temporary setbacks. Again the lesson is that successful groups strike a balance between achieving the task and satisfying more personal needs of members.

7.3 Member characteristics

Characteristics of a group are not just the average or lowest common denominator of individual characteristics. A group has certain properties independent of its members while members retain certain characteristics not relevant to the group. Merely having a collection of capable members is no guarantee of group success. Capabilities of members may set an upper limit on group performance but this potential can only be realised if they are able to develop and maintain an effective human network. Groups of highly competent members who do not work as a team can give disappointing results. Groups composed of members of modest ability who have learned to operate together successfully may exceed all expectations. Anything that helps members to build up an effective human network should therefore promote success.
7.3.1 **Similarity of members.** Developing and maintaining the human network of a group is time consuming and uses resources which might have been devoted to the group task. If a group can be formed from members who not only share a common problem but also common values, beliefs and opinions, have similar backgrounds and find it easy to communicate, the task of developing the human network is lightened considerably. Groups composed of similar members usually find it easier than mixed groups to develop interpersonal relationships, reach decisions, agree on division of labour and share responsibility. Human rewards from working together are greater among friends than less compatible members.

Although homogeneous groups are likely to run smoothly, the very similarity of members may limit their effectiveness. Admitting dissimilar members increases human problems for the group but may also increase its potential. Members of a more mixed group contribute more varied experience, ability and knowledge. If a technical problem has to be solved, a heterogeneous group is more likely to be able to include someone with relevant experience and skills. Complementarity of resources may be exploited to advantage. If the group task is to estimate some future event or choose a course of action where many variables are unknown (estimating next year's wheat price, for instance), increasing dissimilarity of members can improve the quality of the solution. This is because members with more varied views and experience suggest a wider range of alternatives and can be more critical of possible solutions. Individual errors of judgement and personal biases are less likely to distort group thinking in a heterogeneous than a homogeneous group.

If the group task demands very close cooperation and puts a strain on personal relationships, a homogeneous group is called for. Whole farm amalgamation is an extreme example. Machinery syndication or machinery and labour teams for seasonal operations where timing is critical also need to have highly compatible members. Where stages of a task can be separated and divided between members, the need for an elaborate network of personal relationships is less critical. A
heterogeneous group seems more promising if the group task does not demand so much of interpersonal relationships but can exploit member differences. These might be differences in aptitudes of members or differences in farming circumstances. One member of a pig group might prefer to keep sows while another is more successful at fattening pigs. A shared sugar beet harvester might be used to greater advantage if some members have light and some heavy land. Wintering Cumbrian fell lambs on arable by-products on Fen farms is an extreme example of group action exploiting differences between farming systems.

7.3.2 Size of group. As with homogeneous versus heterogeneous membership, largeness and smallness each bring advantages and disadvantages. The smaller group finds it easier to develop an effective human network but has fewer resources for carrying out its task. Dangers of smallness are that the group has too few ideas and that its members can too easily become complacent. Advantages of a larger group include more resources, a wider range of experience and greater critical power but larger groups are more difficult to coordinate and control. The larger the group, the fewer the opportunities for each member to make a unique contribution to the group task. In discussions, the fewer the opportunities for each member to put his views. Reaching agreement becomes difficult or impossible in a large group, so decision making may be delegated to a committee. Communicating committee decisions to members is another problem. As the number of members increases, so it becomes harder for each member to interact with every other member on a personal basis. Larger groups are often less socially rewarding.

Members of a large group lack the immediate sense of involvement which can be a rewarding feature of small groups. Less intimate personal relationships, lack of opportunities to participate, difficulty of communication and a feeling of powerlessness are some negative effects of increasing group size. This is not to say that small groups necessarily have a better record. Communications may be neglected and members denied an opportunity to participate in very small groups too. Perhaps it would be true to say that more effort is needed to overcome such tendencies in larger groups.
Optimum size of a group depends on the nature of the group task. Where solution of a group task demands varied abilities or a range of resources, a larger group has more to offer. When group activities have to be closely coordinated, the ideal would be a small group to minimize problems of interaction and communication. For many purposes, five seems to be an ideal number. Odd-numbered groups are on the whole more successful at reaching decisions than even-numbered; an odd-numbered group can never become deadlocked on an issue. A group of five is small enough to avoid problems of coordination. Being in a minority of two against three does not isolate the minority and is less threatening than being in a minority of one against two.

7.4 Group leadership

Very small groups may be able to work satisfactorily without leaders but as size increases, so does the need for leadership. A leader has been described as someone who finds it easier than other members to secure agreement, a position which he may have won in various ways. He may be an expert in a relevant field. He may be powerful because he belongs to an outside body which has influence over the group. He may exemplify in an outstanding way the values of the group. He may have gained confidence and esteem by giving good advice in the past (Klein, 1961). Camamile (1968) suggests the most desirable quality for a leader of a farm production group is that members should regard him as one whose decisions are usually right. This implies both sound commercial judgement and impartiality in handling disputes.

Despite a great deal of research on the subject, there is no convincing evidence that certain character traits are associated with effective leadership. A more plausible suggestion is that effectiveness is a matter of leadership style being appropriate for the group in question. Individuals have an inherent leadership style and most people would make effective leaders and some situations and not others. Goodness of fit between leader and led is the secret of success. As
Camamile put it, leader and group working together make leadership effective (Camamile, 1968). Leadership styles can be termed autocratic versus democratic or authoritarian versus egalitarian. Following the terminology of the model they might be described as 'task oriented' versus 'human relations oriented.' An authoritarian leader can be very effective in a group whose members believe that leadership should be authoritarian but disastrous if members expect to be consulted and to participate fully in decision making.

7.4.1 Functions of leadership. Responsibilities of a group leader can be divided broadly into two categories; task functions and human relations functions. These correspond with the two types of activity undertaken by a group. The task function is to overcome problems in the task environment and help the group to achieve its goal. In carrying out this function, the leader is obliged to put pressure on members to change and adapt. Since change is rarely welcome, this function arouses negative feelings towards the leader. Members are inclined to blame him when things go wrong. By concentrating on the task, the leader may have to neglect individual wishes and needs of members, reducing his popularity still further. By contrast, the human relations function of leadership is to solve personal problems and internal conflicts in the group. In this role, the leader is supportive of the ideas and wishes of others and rewards members with satisfying relationships, sympathy and friendliness, which gain him popularity. His purpose in this role is 'to make members feel glad they belong to the group and feel sorry for those who do not' (Camamile, 1968).

The person chosen to lead a group might be one who is best able to combine the two aspects of the role. In practice it is not unusual for functions of leadership to be shared by two or more members. Since different facets of the role demand different qualities and kinds of behaviour, this is not surprising. Some people have a natural leadership style which inclines towards autocratic while others have more highly developed skills in handling personal relationships. Few are able to perform the varied roles which leadership requires with equal competence.
7.4.2 **Participation.** Apart from differences in leadership style, there is another good reason why a group might benefit from sharing the functions of leadership. 'When members have too much leisure, the leader has too much work. Neither of these conditions is conducive to high morale' (Klein, 1961). It is tempting for one capable member to assume responsibility for a major share of group organisation and for others to let him. In the long run this is not a healthy situation for the group. The leader comes to resent the way he is being exploited. Other members need to feel they have been consulted and their views considered, otherwise they begin to believe that group decisions do not apply to them. There is evidence that groups in which members participate are more effective than those where most decisions are left to the leader. Participation improves division of labour within the group. It reduces problems of control since orders are based on full information and not seen as arbitrary commands from above. Participation helps members to substitute for one another more readily since they all know what needs to be done. Variety of jobs in a group is rewarding in itself while exchange of help tends to increase friendliness and promote members' satisfaction with the group.

7.5 **Group conflict**

No active group is ever immune from conflict. A group locked in internal strife is not providing human rewards to members. Conflict is often reflected in poorer performance of the group task too. If it is to be successful and survive, a group must therefore find ways of resolving its internal conflicts or, better still, anticipating and avoiding possible sources of friction. This section considers a few common sources of group conflict. Examples of each kind of problem in farming groups are to be found in Powell, Gasson and Bartholomaeus' (1979) handbook on group farming.
7.5.1 Breakdown of communications. A farmer working on his own does not need to keep anyone informed about his decisions and movements. When a group is formed, however, the sharing of tasks makes it necessary for members to communicate with one another. Failure of communications is one of the commonest causes of disagreement in farming groups, as in any other kind of group. It undermines personal relationships for when uncertainty creeps in, doubts and grudges can flourish.

Conflict may arise early in the life of a group because the human network with channels of communication and interpersonal relationships, has not been sufficiently developed. When the group begins to operate, members may discover that they do not really agree on what they are trying to achieve nor who should be responsible. In theory these matters should have been decided before group operations began. In practice important details may have been overlooked. The answer must be to go back to the discussion stage.

Failure to communicate is not only a problem in newly formed groups. In the early stages, much effort goes into promoting the group, persuading farmers to join and providing them with basic information. After this it is all too easy to neglect the converted. Communication needs to be a continuing process throughout the life of a group. It also needs to be a two-way process. More especially in large groups, decisions have to be passed down from management to the workforce but ordinary members and employees should be given opportunities to respond, ask questions, discuss management decisions and offer constructive criticism. If denied the opportunity, members may lose interest in the group's activities.

Large organisations, conscious of the importance of keeping members involved, sometimes use formal channels of communications such as newsletters, journals, regular meetings, conferences or open days. The danger with a small group is that, because members are few and meet face to face, no special effort is made to ensure that essential infor-
nination is passed on and that grievances are aired. To avoid this kind of problem, even small groups might find it an advantage to hold regular formal meetings which every member is expected to attend. At a more practical level, some groups use two-way radio in tractor cabs to keep one another in touch with events on the farm.

7.5.2 Formation of splinter groups. People form groups in the first place because they share some common need or problem which they hope can be solved by joining forces. In the early days, common goals serve to bind members together. Over time, goals can change. Needs of members develop in different directions. Early goals are fulfilled and the group looks for new activities to justify its existence. New goals may therefore emerge which are not shared by all members. This can be a source of conflict.

Some members of a group may subscribe to new goals while others do not. If new goals are compatible with the broad objectives of the parent body and do not harm interests of non-supporters, this branching out of goals need not be a source of conflict. Increased satisfaction among members of a sub-group may even enhance cohesiveness of the group as a whole. This was why a large requisite supply co-operative encouraged small groups of members to form service groups, such as the joint workshop group described in section 5.3.2.

New goals may emerge which are incompatible with original objectives and this can polarise members. The original group may disintegrate into splinter groups. The larger and more heterogeneous the original membership, the greater the tendency to split into factions pursuing different ends. One way of avoiding this danger would be to divide a large organisation into a series of local cells with a degree of self-determination, combining advantages of size and intimacy by keeping them under the umbrella of the parent organisation.
7.5.3 **Difficulty in reaching consensus.** Conflict of a different kind arises when members are fully aware of group policy and objectives but disagree with some aspect. It may be goals themselves, priorities attached to goals or means of achieving them which are the source of contention. In other words, although members agree to cooperate, they disagree how to cooperate.

For members to disagree over the best way of reaching a goal is not necessarily an unhealthy state of affairs. One of the strengths of group action is that members with their varied experience can offer a wider range of solutions to shared problems than an individual could. On the other hand, a group cannot act until agreement has been reached. Increasing size and heterogeneity may improve the quality of possible solutions but it also increases the difficulty of reaching consensus.

Agreement over a group task will be achieved more readily if members recognise the importance of unified action and if there is a pleasant, relaxed atmosphere. If facts are available and are used and if the problem solving procedure is easily understood, orderly and focused on one issue at a time, a group will be helped to reach agreement.

7.5.4 **Interpersonal conflict.** Conflict over a group task can lead to personal antagonism between members. Disagreement over objectives, conflict over standards or methods of working, careless use of group machines or equipment, unequal contributions of labour or management, absence of a member at a critical time, could all deepen into conflict between members.

Reasons commonly given for failure of farming groups are 'clashes of personality' or 'selfish behaviour.' Conflicts of this nature are probably the hardest of all to resolve. Even so it is constructive to ask whether such behaviour is typical of the person concerned or whether he only seems to act this way in this particular...
group. Habitually selfish or anti-social behaviour may be due to some inadequacy in the person which is beyond the power of the group to alter. A farming group would do better not to accept a person who is known to be quarrelsome or selfish. Not only should members be personally compatible but they should be able to accept one another's farming. Any group would be well advised to review the qualities of a new applicant and inspect his farm before admitting him to membership.

If aggressive or selfish behaviour on the part of one member only appears in the group context, the fault may lie in the unique set of relationships within the group. Having a new member join an established group can be a source of conflict, for example. New members have not shared the early struggles, disappointments and triumphs which help to bind original members together. A small, intimate group of friends with a well developed human network may resent the intrusion of another person into their circle. Difficulties may lie in communication. As a group gains experience, it may tacitly alter rules, procedures and even objectives which were set out in the original constitution. Decisions like these are rarely made explicit and it may not occur to anyone that the written constitution is out of date. When a newcomer acts in a way which seems inappropriate, he may simply be acting out of ignorance. A sympathetic and imaginative approach to problems and needs of new members could help to avoid this type of conflict.

If one member of a group seems particularly critical of group performance, swift action may be needed. The dissatisfied member may subconsciously be demanding reassurance, sympathy or praise from the group. Conflict will appear to stem from some aspect of the task but in fact it lies in the human environment. Conflict may be avoided if the underlying problem of the person who is criticising the group can be recognised and allowed full expression.
If interpersonal conflict cannot be resolved, the only answer may be some form of withdrawal. The group may have to withdraw from controversial aspects of the task and tackle only simple, non-contentious issues. Members may withdraw from one another and communicate only through the chairman. Complete withdrawal or exclusion of disaffected members may be the easiest way of avoiding open conflict. Yet the very thought of how conflict would damage members' interests can act as a warning and draw members together again.

7.6 Cohesiveness

One of the characteristics which distinguishes a group from a random collection of individuals is cohesiveness. This is the force which binds members together and helps the group withstand disruptive influences from outside or within. The more cohesive a group is, the greater the power it is able to exert over its members. This power can be used to alter members' attitudes or actions, changes which may conflict with members' own preferences. The magnitude of the change which a group can impose on members will only be as great and no greater than forces acting on members to remain in the group. If greater, they will leave. A farm production group tries to change members' behaviour. For instance they may have to let the group decide when they should use a harvester. They may have to pool grain and delegate to others the decision when to sell. Factors which make for cohesiveness will help to determine how effective the group is in persuading members to accept group discipline.

A member can be drawn to a group because belonging is attractive to him. Belonging to an attractive group can be an end in itself. Factors making a group attractive and therefore cohesive include friendship among members, a democratic style of leadership, status of the group, opportunities for interaction and the length of time members have been together. Equally a person might be held in a group because the group controls rewards which he values, because he sees disadvantages in not belonging or because there are barriers to leaving. Any of these factors can contribute to cohesiveness.
Irrespective of the source of cohesion, cohesive groups perform better than less cohesive ones. There is no 'right' or 'best' motive for forming a group. Groups which are cohesive because they provide human rewards of friendliness or companionship can be just as effective as groups whose members are bound together by the prospect of achieving goals to benefit their own farm businesses.

Other things being equal, a cohesive farm production group is one with high status in the farming community which conveys prestige on members. Cohesiveness is associated with groups which are well organised, whose members are thought to take their responsibilities seriously, groups which have been successful in the past and which members expect to be successful in future. Members like and respect one another and have ample opportunity to meet and talk in the course of group activities.

This chapter has put forward a model of group action which stresses interdependence of task and human relationships. Groups with a small, homogeneous membership find it easier than large, heterogeneous groups to build an effective network of human relationships. Leadership has to combine task and human relations functions too. Small, intimate groups are likely to be more cohesive than large and cohesive groups are able to impose more discipline on members. Small groups are less prone to suffer from breakdown of communications, formation of splinter groups or lack of consensus. On the other hand, smallness has its disadvantages and for some purposes, the wealth of resources, variety of talents and interests and greater critical power of a large, homogeneous group can be an asset. The final chapter tries to apply some of these conclusions to problems of labour sharing in agriculture.
8. PRACTICAL RECOMMENDATIONS

8.1 Forming a group

A group consists of 'persons able to communicate with one another who are willing to work together to achieve a common purpose' (Barnard, 1938). These elements of communication, recognition of a common need or problem and willingness to cooperate to solve it, are necessary conditions for any formal group to exist. Yet they are not in themselves sufficient conditions for group formation. Something else is needed to set the ball rolling. First, the idea of group action must somehow be introduced to the individuals concerned and second, their enthusiasm to try it out must be stimulated. National organisations can help to meet the first condition while leader farmers may be better for the second.

8.1.1 Promotion by national bodies. Organisations like the Agricultural Development Advisory Service, the Agricultural Training Board, the British Society for Agricultural Labour Science, the Central Council for Agricultural and Horticultural Cooperation, the Farm Management Association, the National Farmers’ Union and the National Federation of Young Farmers’ Clubs are well placed to promote the idea of cooperation in labour use. Their networks should catch any ideas that are circulating from commercial organisations, research institutions or farmers' associations, at home or abroad. Ready-made channels of communication such as journals and newsletters, local meetings, national or regional conferences and staff training courses can be used to disseminate ideas widely. Field staff in these national organisations are in touch with individual farmers and farmers' groups, so that ideas can be passed on by personal contact. In any case, farmers would be likely to turn to one or another of these organisations for advice on matters of farm production, cooperation or labour use.

1. Processes and problems of group formation are dealt with in a very practical way in two reports from Produce Studies Ltd. (1966 and 1968).
One example of national organisations playing a role in promoting the idea of labour cooperatives was the visit to the Netherlands by a small party of ADAS, Ministry of Agriculture and Central Council specialists to study forms of cooperation in farm production (Hill, Morley, Middleton and Shorney). One outcome of this initiative was an invitation to the Central Council's Cooperative Adviser for Wales to address a meeting of representatives of Welsh agricultural training groups on the topic of relief labour cooperatives. Another example was the participation of members of the National Farmers' Union and the National Association of Agricultural Contractors in a CEPFAR conference on relief services in the Netherlands in 1975. Following this conference, the two organisations began working on a pilot scheme to set up relief milker cooperatives in Britain (Pacey, 1978).

8.1.2 Role of 'advocate.' To introduce a new idea is not enough. Someone has to inspire farmers with enough enthusiasm and confidence to act upon it. An experienced and authoritative figure is needed to play this demanding role. It might be within the capability of the adviser who introduced the idea to inspire a farmer audience but many would argue that this part is better played by a leading farmer in whom other farmers have confidence. As Gardiner and Gill (1964) pointed out in their study of machinery syndicates, example and leadership are particularly important in the spread of the group movement. Farmers who are themselves members of several syndicates are the most effective advocates. They concluded that direct contact between members and non-members is likely to be the main way of starting new groups. Presence of syndicates in a district can itself stimulate further growth. Shawyer (1970) in a detailed study, traced the spread of machinery syndicates and buying groups across the country. Two significant influences on diffusion were personality of the 'advocate' and distance from an existing successful group.

8.1.3 Building on an existing local group. When a new group is being formed, it may be possible to build on an existing local group, perhaps a branch of a national organisation. Use can be made of membership
lists, personnel, formal channels of communication, office facilities and premises of the parent organisation. Besides this, the task of building up the human network of the new group will be much easier if members are already acquainted and have in common their membership of the parent body. In a small organisation such as a machinery syndicate they would have had experience of working together. As Table 6 indicates, most of a sample of 94 agricultural training groups operating in 1975-6 were based on existing groups and organisations. Only 29 were started from scratch by the training adviser bringing together interested farmers who had not previously cooperated (Dick, 1977).

Advantages of developing labour sharing groups from existing cooperatives were touched on in sections 5.3.2, 6.1 and 6.2.

Table 6. Origins of 94 training groups operating in 1975-6

<table>
<thead>
<tr>
<th>Origin</th>
<th>per cent of groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFU branch</td>
<td>34</td>
</tr>
<tr>
<td>Buying or marketing group</td>
<td>22</td>
</tr>
<tr>
<td>Young Farmers' Club</td>
<td>5</td>
</tr>
<tr>
<td>Other organisation (FMA, NUAAW etc.)</td>
<td>10</td>
</tr>
<tr>
<td>Interested farmers not previously working together</td>
<td>29</td>
</tr>
<tr>
<td>All groups</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Dick, 1977

Building on an existing organisation can have its drawbacks too. Goals of the new group may not be entirely compatible with those of the parent organisation. As a consequence, the new group may be deflected to serving the needs of the parent body. Where it is competing with the parent body for scarce resources, such as organiser's time, the new group may be given low priority. Some members may support the need for a new group and participate in it while others do
not, resulting in a split in the membership. The parent organisation may have long standing divisions within itself and thinking about the new group may follow the lines of this traditional split. Members will then be inclined to seek a compromise between conflicting views, a 'lowest common denominator' rather than a 'highest common factor.' It is vital that early thinking about a group takes place among basically likeminded men (Produce Studies Ltd., 1966). Office holders in the parent organisation may automatically be given office in the new group and high status members may feel an obligation to join and give a lead even if they are not in sympathy with the group's objectives. At the same time, other farmers keen to join the group may be excluded because they do not belong to the parent organisation.

A compromise solution would be to use the network of an existing organisation or group to promote the idea of a labour sharing cooperative but to resist the temptation of enrolling members of the parent body en bloc. An organisation such as the National Farmers' Union provides a convenient framework as a large proportion of all farmers belongs and receives its publications. A county journal or a branch meeting could provide a forum for introducing ideas about cooperation in labour use. Interested branch members could then be invited to an open meeting to discuss the proposal. This meeting would not be held on the same evening as a branch meeting and it would be open to non-members as well. Branch membership lists could be used to canvass the idea and the local branch secretary might assist in the formation of the group. Once a new group was established, however, it would have to be self supporting, paying its way and providing its own administration. There would be no obligation on the NFU chairman to lead the new group or the branch secretary to organise it.

8.1.4 Financial incentives. Financial aid for setting up and managing production groups, which would include labour cooperatives, may be available from EEC funds under Article 12 of Directive 72/159. Grants are payable for the first three years for the following purposes:
91.

- surveys and feasibility studies carried out prior to formation of a production group
- costs of formation
- salaries and expenses of employing key staff to supervise and manage the group activity but excluding staff engaged in production activities
- management selection.

There must be at least three members before a grant can be claimed and Article 12 imposes a maximum and minimum amount payable. Claims have to be channelled through the Central Council.

While it may seem anomalous to provide incentives to persuade farmers to proceed in a direction which is to their own ultimate benefit, the Central Council believes, on the strength of previous experience, that incentives are necessary to lead farmers into cooperation. Any incentive should help farmers to make an investment more effectively, perhaps sooner than otherwise and with less risk of failure. The Central Council's insistence on properly researched proposals, adequate management and proper accounting procedures helps to ensure that any group or cooperative starts on a firm commercial foundation. The level of incentive does not have to be high. The Central Council works on the principle that aid should never be so great as to persuade recipients to undertake projects which they would not have been prepared to finance on their own (Central Council for Agricultural and Horticultural Cooperation, 1978).

8.2 Size of group

Optimum size of a labour sharing group depends on the need it is intended to fulfill. Groups designed to provide skilled relief workers in emergencies must necessarily cover large numbers of farms. Labour pools, too, must be large if they are to ensure a good match between labour surpluses on one farm and deficits on another.
The model of group action developed in the last chapter stressed advantages of small groups. A small group tends to be more socially rewarding to its members and therefore more cohesive. This means it is able to achieve more because it can impose greater discipline on members. Small groups are less likely than large to disintegrate as a result of breakdown of communications, formation of splinter groups or failure to reach agreement. Although larger groups have certain advantages, they are on the whole more difficult to coordinate and control and less rewarding to belong to. For a group embarking on a relatively unfamiliar and untried type of joint activity, a small number of highly committed members who fully understand and endorse the purposes of the organisation, would seem to be a better bet.

Experience shows that most surviving farm production groups and machinery syndicates in Britain are very small, often with two or three members only. Machinery or labour pools need to be rather larger than this. In Norway, for instance, 'maskinrings' or cooperatives of family farms pooling labour and machinery seem to work best with between five and seven members (Hornslien, 1964). Six seems to be the maximum convenient number for groups of Fen smallholders sharing labour and machinery (Ward, 1967). Where for technical reasons an organisation needs to be large, ways can be found of creating sub-groups which can enjoy benefits of smallness. Service groups formed within the membership of a large cooperative (section 5.3.2) illustrate this principle. Deeside Farmers, a production cooperative in Cheshire has over twenty members but a system of sub-groups helps to maintain the close cohesion so necessary for success (Rider, 1977).

8.3 Who will join?

While this study has indicated many ways in which multi-farm use of labour resources could help to overcome labour imbalances, it has not claimed that cooperation is the answer for every farm or every farmer. In the first place, only a certain proportion of farmers seems to be 'cooperative minded.' Within this population of potential cooperators, only a certain proportion are compatible with one another and have compatible farm businesses.
8.3.1 Characteristics of cooperative farmers. Statistics on membership of farm production groups are hard to come by. The fact that most production cooperatives in British agriculture are unincorporated organisations which are also unregistered, makes it impossible to estimate how many there are or what volume of production they account for (Morley, 1975). Machinery syndicates have probably been studied more than other forms of farm production group. Although statistics are readily available on numbers of syndicates formed at any point in time, rather less is known about how many have survived (Greetham, 1975). Hall (1972) noted that 1700 syndicates had been formed up to 1972 in England and Wales and that at least 610 existing syndicates were then taking advantage of loan facilities. He did not suggest what had become of the other 1100 groups.

One ADAS survey in Cumberland revealed that 19 per cent of farmers were involved in multi-farm use of machinery, excluding casual lending and borrowing (Peart, 1970). According to the sugar beet survey, about ten per cent of growers cooperate in some way in harvesting and about ten per cent of the national crop is harvested by joint action. Dick (1977) has suggested that in practice not more than ten per cent of farmers in Britain have any real contact with or interest in farm production cooperatives, machinery syndicates, buying and marketing groups, training or discussion groups.

Is there any way of identifying the ten per cent or so of 'cooperative minded' farmers, the target population for any new programme of group development? A growing body of evidence from Britain and elsewhere suggests that farmers who belong to production groups are younger, better educated and more innovative than the farming population as a whole. These characteristics tend to go together, younger people having had more full time education and greater opportunities for vocational education and training which could make them more open to new developments.
In a survey of horticultural producers in Yorkshire and Lancashire, Aitchison and Knowles found convincing relationships between innovativeness and propensity to cooperate. A significant negative correlation was found between age and 'cooperativeness' in a Finnish study, cooperativeness being a function of exchanging labour and machinery (Honkala, 1969). In two-thirds of French group farms or GAEC, at least one member had formal professional training in agriculture, in contrast to only 8 per cent of all French farmers (Raup, 1977). Hirsch and Maunder (1977) reported that members of fully integrated group farms in the Federal Republic of Germany were usually in the 30 to 45 age range and above average in educational attainment. Poland has witnessed a tremendous growth of farm production groups and machinery sharing groups since 1972, these being voluntary associations in contrast to compulsory collectives formed after the Second World War. Members are younger than the average Polish farmer and above average in general education and agricultural qualifications (Czyszkowska-Dabrowska, 1976). All these studies illustrate the fact that working in a group attracts younger, more educated, energetic and businesslike farmers, those who are least likely to be hidebound by tradition.

Research has shown that small and large farms are less likely to be involved in group activities than those of medium size. Studies of machinery syndication in England and Wales have confirmed that smaller farmers tend to borrow and share on an unofficial basis while the largest can justify owning any machinery they need (Gardiner and Gill, 1964; Robinson, 1968; MAFF/ADAS, 1971). Farms of GAEC members in France are typically above average size for their region (OECD, 1971).

A report by Produce Studies Ltd. (1966) suggests that fear of change is at the root of many farmers' reluctance to cooperate. This would help to explain why it is usually the larger, better educated, more urbanised and innovative farmer who takes readily to cooperation rather than the small man, who certainly needs it more.
Farmers contemplate change for two reasons. Either they perceive an opportunity to be grasped or they feel themselves to be threatened and forced to change by pressures beyond their control. Joining a farm production group could represent a major change in farming policy. It might be argued that farmers would be most likely to consider this drastic type of action when their businesses were under pressure from falling prices and rising costs. By cooperating in some aspect of production, the farmer might be able to maintain output while reducing costs. By disposing of his harvester and investing in a part share of a syndicated machine, for example, harvesting costs might be reduced for the same acreage of crop. Joining a labour pool or relief labour cooperative might allow him to employ one less permanent worker.

It has been observed, however, that farmers seem to be psychologically resistant to cooperation if it involves cutting costs. Whereas adding output at the same or a slightly higher level of costs gives the farmer a reassuring feeling of building up his business, achieving the same output at a lower level of costs may look uncomfortably like running the business down. Cutting costs may threaten security which many farmers value more highly than maximising profits. For this reason, farmers may find it difficult to accept forms of cooperation in production which smack of retrenchment (Produce Studies Ltd., 1968).

Burston (1977) noted that farmers are readily prepared to cooperate when this will allow them to embark on a new enterprise. They are less prepared to sacrifice their independence as a response to a more gradual cost price squeeze. Polish experience confirms the suggestion that it is not the smallest or weakest farms, those most impoverished, indebted or short of manpower that form groups. Rather it is the economically sound with businesses above average size, those farmers who are anxious to expand and improve social and living conditions (Czyszowska-Dabrowska, 1976). Aitchison and Knowles, too, found a positive association between cooperation and orientation to
growth of the farm business. The stronger the support for goals of growth, the greater the appreciation of the benefits of cooperation. Impressions from the sugar beet survey confirmed this finding. Growers seemed attracted by the idea of buying shares in a larger harvester to handle an increased area of beet. They were much less enthusiastic at the thought of giving up their own harvester to share with someone else while the beet acreage remained the same. Cooperation seems to be an acceptable way of expanding an enterprise when farmers are confident about their future prospects. It is not a solution which comes readily to mind when they feel under pressure, lacking confidence and doubtful about the future.

Another characteristic of members of production groups is that they are or have been involved in other kinds of cooperative activity. The sugar beet survey covered a sample of 150 growers, of whom 5 belonged to sugar beet harvesting syndicates with a formal constitution, 10 had informal sharing arrangements with neighbours and 22, although not then involved in group action, were seriously considering joining a formal group. As Table 7 shows, farmers who were members of formal groups

<table>
<thead>
<tr>
<th>Cooperative activity in sugar beet</th>
<th>Coop. societies per head</th>
<th>Formal groups per head</th>
<th>Informal sharing activities/head</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal group</td>
<td>0.8</td>
<td>2.6</td>
<td>1.0</td>
</tr>
<tr>
<td>Informal group</td>
<td>0.8</td>
<td>0.4</td>
<td>0.9</td>
</tr>
<tr>
<td>Considering joining a formal group</td>
<td>0.5</td>
<td>0.7</td>
<td>0.2</td>
</tr>
<tr>
<td>Non-cooperator</td>
<td>0.2</td>
<td>0.2</td>
<td>0.1</td>
</tr>
<tr>
<td>All growers</td>
<td>0.3</td>
<td>0.4</td>
<td>0.2</td>
</tr>
</tbody>
</table>
scored highest on every measure of cooperation. They belonged to most cooperative societies, participated in most formal group activities (sugar beet groups, other machinery syndicates, grain harvesting, storage and marketing groups, buying groups and training groups) and shared labour and machinery to a greater extent than other growers. (Incidentally, they were also twice as likely as the average grower to have sent a worker on a training course for sugar beet harvesters, a measure of their progressiveness). Informal cooperators and those considering joining groups scored lower on all measures of participation but considerably above the rest of the sample. The passive majority showed very little cooperative activity of any description.

Evidence from other countries points in the same direction. Farmers in Finland who worked together in group cowsheds believed that the most important criteria for membership were to be young and 'cooperative minded,' to know other members and to have had some previous experience of joint action (von Numers). Thomas (1970) found a strong association between farmers' participation in formal and informal cooperative activities in Merionethshire. Most German farmers engaged in full farm integration had previously worked in a less formal way with the same partners. Another interesting discovery was that often one or more partners was active in public life (Hirsch and Maunder, 1977). More than half the GAEC members in one study, too, held positions in other farming organisations (Raup, 1977).

Two influences seem to be at work here. In the first place, farmers who know one another well and have already worked together, perhaps in an informal way, have built up a network of relationships. If they decide to make the group formal, the groundwork will already have been done. In the second place, experience of cooperation in any form can be valuable when farmers embark on a new joint venture, even if gained with other partners. Studies of machinery syndication bear this out. Problems of cooperation envisaged by non-cooperators bore little relations to actual experiences of members of syndicates (Gardiner and Gill, 1964; Ward, 1967; Robinson, 1968). Farmers with first hand experience of cooperation have not found the problems to be insuperable.
To summarise, the most likely candidates for labour sharing schemes will be farmers operating middle sized businesses in close proximity to one another, facing similar labour problems. They will be among the younger, more educated and more progressive elements in the farming population. Typically they will be 'joiners' of farming organisations like buying groups, training groups and discussion groups. Often they will hold office in these organisations. Their participation will have afforded them opportunities to discuss labour problems and to get to know one another better. Ideally each will have had some previous experience of cooperating in farm production, possibly on an informal basis. While prepared to tackle their problems as a group, they will be more interested in suggestions which involve expanding output than cutting costs.

8.3.2 Compatible members. There can be little doubt that temperamental compatibility of members is one of the main ingredients for successful group action. This is particularly crucial where members have to work closely together, as in farm production. It would be less critical for a training group or a buying group, for example. A discussion group might actually benefit from having a mixed collection of members.

Farm production groups often consist of close relatives. GAEC in France and farm production groups in Finland and Poland, for instance, are predominantly family groups (Raup, 1977; Honkala, 1969; Czyszkowska-Dabrowska, 1976). While kinship does not always mean compatibility, it seems that family ties are more likely to bind members together than similarities of age, background or type of farm.

8.3.3 Compatible farms. Besides cooperative individuals who are compatible with one another, a labour sharing group needs farms or farming systems which combine well. Groups could aim to bring together similar or dissimilar farms. While differences between farming systems might be exploited to advantage, they might also prevent an effective group network from being developed. Methods of working, goals and attitudes of members with dissimilar farms might be so divergent as to keep them apart.
As pointed out in section 8.3.1, groups are not likely to be formed among the very largest or very smallest farms. Very large farms already enjoy any economies of size which grouping might bring. They probably have sufficient flexibility in their regular labour force to match supply with demand at most times of year, hiring a few extra workers at peak times. Large farms probably carry their own experts such as mechanics, estate workers and office staff. Arable workers may double as relief milkers. Very small farm businesses, too, may see little advantage in formal labour sharing schemes. Labour requirements are modest and peaks may be satisfied by informal arrangements. Administrative costs of organising exchange of occasional hours of labour between large numbers of small farms might outweigh the benefits. Other farm factors which might rule out cooperation include distance between farms, inaccessibility and highly specialised labour requirements.

Gardiner and Gill (1964) found no particular tendency for syndicates to be restricted to farms of one size; small and large farms were often found in the same machinery syndicate. In Spain, too, groups are sometimes formed between one or more large farmers trying to cope with labour shortages and a number of small farmers who cannot afford to mechanise. Nevertheless this can lead to conflict between interests of capital and labour, similar kinds of conflict being observed in French GAEC (OECD, 1971). Ward (1967) described a potato harvesting group in the Fens which failed because members had unequal acreages. Bradley (1961) concluded from the Teign Valley experiment to promote silage groups that small and large farmers cannot easily cooperate as their goals are not compatible.

Since labour sharing would be a new venture in Britain, promoters would be well advised to start with modest attempts to organise simple joint activities among small numbers of likeminded farmers with similar farm businesses, similar goals and attitudes, who are prepared to trust one another. To introduce different sizes or types of farm would be an unnecessary complication.
8.4 Leadership and participation

Functions of leadership were discussed in section 7.4.1. It was pointed out that the leader is responsible for getting the group task accomplished and for keeping members satisfied, functions which may at times conflict. Since the two facets of leadership demand such different qualities, it is not unusual for them to be shared. Providing the two leaders agree completely on the division of responsibility and work in close collaboration, there seems no reason why a labour cooperative should not have a 'task leader' and a 'human relations expert.' The latter would concentrate on personal needs and problems of members, leaving the former free to handle problems raised by the task itself.

Members of farm production groups are usually farmers with their own full time businesses to run. Time available for group activities is limited. This is another good argument for sharing responsibility for leadership and decision making. Even if one member had outstanding ability on all fronts, the group could make unreasonable demands on his time until his own business or the group began to suffer. At the same time, section 7.4.2 indicated that groups in which all members participate in decision making and in carrying out the group task are more effective than those in which most decisions are left to the leader. Participation of all members in decision making and day-to-day activities helps to foster the human network of the group.

There are various ways of dividing responsibilities of leadership. One possibility is to make one member fully responsible for all functions but to rotate the office regularly, giving each member a turn of not more than a year at a time. Another approach is to allocate roles of task leader, human relations expert, secretary/treasurer and so on between members, either on a permanent basis or switching roles from time to time. Tasks could be subdivided still further, designating one member as manager of field operations, another as maintenance and workshop manager, another in charge of
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the farm office. A third possibility is to employ a group manager and devolve most of the work of running the group on to his shoulders, leaving members free to run their own farm businesses. There might in fact be three layers of leadership. At the top, all farmer members would have a say in major decisions and formulate group policy, the chairman conducting meetings. One level below, activities of the group would be directed and controlled by the group chairman and a salaried manager who shared responsibility for task and human relations problems. At a lower level still, individual members would be made responsible for certain areas of work, in which capacity they would be answerable to the task leader.

One farm production group with about thirty members, finding the burden of leadership too onerous for any individual farmer member, appointed a full time manager to organise group operations, recruit new members and develop group activities. The manager plays the role of task leader in this instance, the group chairman performing the balancing 'human relations' role.

One aspect of leadership is crucial in a labour sharing group. It is essential that employees know who is in charge. Clearly it is most unsettling if an employee has any doubts as to where his loyalties lie. Unless members of the group approach this question with care and consideration, there could be conflict in labour relations. When members are working for the group, too, it is most important they should know who is in control, who can give orders to employees and who is responsible for what (Camamile, 1968).

8.5 Conclusion

The type of group envisaged in this study is a small, friendly, cohesive, local group composed of farmers with similar backgrounds and objectives, sharing common problems in labour use. It is important that members identify with the group and think of it as their own organisation. This means that impetus to form the group should come from farmers themselves and should not be imposed from above. Even
though the original idea may have been transplanted, members should perceive their group as something springing up from the grass roots.

A labour sharing group should start with a practical and modest objective, one whose results are easily visible. In the process of working together in this relatively simple task, members would learn how to get along with one another and the group network would develop. Success in a straightforward undertaking would give members confidence in one another and in the group, encouraging them to tackle more demanding activities requiring greater commitment and group discipline. To embark on a difficult and demanding task at the outset, before the group network was fully developed, would be to court disaster. Camamile (1968) has suggested that syndication between farmers who still retain a real degree of independence, is an effective way of developing cooperation. If would-be cooperators are faced at the outset with the prospect of losing their business identity, they may be frightened away.

Finally, every effort should be made to cultivate the human network of the group. A friendly group is not only rewarding in itself but can also be more effective in pursuing the group task. An attractive group is more cohesive than an unattractive group and the more cohesive it is, the more pressure it can exert on members to submit to group discipline. Time for discussion, reflection and evaluation of group activities can be well spent if it results in suggestions for improving performance. In the study of training groups it was found that factors making for a close knit group favoured development of new activities. As pointed out in Chapter 6, cooperation in one area often leads to cooperation in related fields. Cooperation in labour use could be just one link in a chain of group activities.
9. SUMMARY

One of the major preoccupations of British agriculture up until the early 1970s was how to arrest 'the drift from the land.' In today's changed economic climate, emphasis has shifted to ways of making better use of scarce manpower resources remaining on farms. Farmers are caught in a cost price squeeze which focuses attention on the need to improve efficiency. Since costs of employing labour have been rising faster than costs of other inputs, employers are under intense pressure to raise labour productivity. Three possible approaches are to economise in labour use, to upgrade the quality of labour employed and to improve the 'goodness of fit' between labour demand and supply.

This report concentrates on the question of matching labour supply to demand on farms through cooperative action. The approach is threefold:

- collecting together relevant information on the scope for cooperation between farmers in the training, development and employment of skilled manpower
- discussing possible advantages and disadvantages of various forms of labour group
- suggesting practical steps to be taken in setting up a labour cooperative.

Main sources of information have been agricultural statistics from the annual June census, surveys of sugar beet syndicates and agricultural training groups, literature on group dynamics and personal communications with numerous individuals involved in agricultural cooperation at various levels, in Britain and Australia.
The aim of this study is to open a debate on cooperation in labour use rather than to say the last word on the subject. It is hoped that this report will prove useful to agricultural policy makers, advisers, innovative farmers and any others who are in a position to introduce new ideas and influence opinion in the industry. Since the subject is such a broad one, no attempt has been made to cover every angle. Instead, following a general introduction, human problems of farm production groups are treated in some depth. In the author's opinion, this is the most crucial and the most neglected aspect of agricultural cooperation.

Ways of providing a labour service can be classified as informal, commercial and cooperative. Informal arrangements imply that help is exchanged on a friendly basis involving no financial transaction. Neighbourly help in a crisis and mutual aid are examples of informal labour exchanges in agriculture. While informal arrangements may continue to meet a need, modern trends in agriculture (increasing concentration and specialisation of enterprises, higher capital investment, a more businesslike approach) may be undermining the foundations of neighbourly help and mutual aid. Any new development of labour services must be on a more formal basis. This means a choice between cooperative and commercial arrangements.

Although cooperation and informal aid or 'helpfulness' are often regarded as synonymous, there is an important difference. Cooperation is a means to an end, helpfulness an end in itself. Cooperative arrangements involve prior discussion and formal commitment to a scheme which is legally binding and which continues on agreed terms for a defined period.

Seasonal employment and use of contractors are examples of the 'commercial' approach to labour shortages. Commercial arrangements will no doubt continue to meet the greater part of the demand for additional labour services. Only where commercial services are withdrawn, break down or become uneconomic or where new demands emerge which cannot be met by commercial enterprise, will farmers be likely to consider the cooperative alternative.
A cooperative has certain inbuilt advantages over its commercial counterparts. Labour cooperatives would have added advantages. A relief worker employed by a small group of farmers would soon be on a familiar footing with his employers, their families and any other employees. This would be an asset if he had to manage the farm in an emergency. A cooperative labour pool could utilise spare capacity already available on members' farms.

Chapter 2 provides a background against which various types of labour imbalance can be identified. Since 1950 the hired farm labour force in England and Wales has been reduced by more than half, leaving many farms seriously undermanned. Carrying only enough regular labour to cover routine work in a normal year, they have no slack to cope with seasonal peaks and the occasional crisis.

Despite trends in part time working, casualisation, feminisation and increasing reliance on contractors, farmers and regular workers still contribute something like four fifths of all man hours worked on farms. Labour forces are predominantly small, half the regular labour force being employed in groups of three or less. Half the labour employing farms have only one full time worker. The smaller the labour force, the harder it is to achieve a good match between labour supply and demand. If one worker is absent, a heavy burden falls on the rest.

Only a third of agricultural holdings nowadays employs any full time workers. This means that farmers are the only regular workers on many farms, alone for much of the time. The single handed farmer is particularly vulnerable to illness or injury. It is difficult for him to take a weekend off or have a holiday away from the farm. Apart from these personal consideration, the farmer without regular help is hampered in making any major changes to the farm business.
The family developmental cycle is another source of labour imbalance for the small family farm. In the early and late phases, running the farm puts a heavy physical burden on the farmer and his wife. In the middle phase, when children are of an age to work at home, there may not be enough work to keep them fully occupied. Some kind of supplementary employment is needed, either on or off farms, for underemployed family workers.

Demands for labour which cannot be met by the regular workforce are the subject of Chapter 3, where they are classified by type of skill, type of worker and predictability. The study is mainly concerned with provision of additional skilled labour, possessing either farm skills or other skills which the farm requires from time to time.

A distinction is made between relief workers who replace a regular member of the labour force and supplementary workers who provide an extra pair of hands at busy times. Demands for additional labour may be linked with use of large machines which the farm does not own. Complex pieces of machinery may need specialists to operate them. Harvesting operations may call for extra tractor drivers to act as supporting members of the machinery and labour team.

Some additional labour demands are entirely predictable and within the farmer's control. They can be fitted into slack periods or postponed until sufficient labour is available. Major land improvement projects come into this category. Some labour requirements are predictable but not wholly or not at all within the farmer's control, harvesting operations being an example. A third category covers situations which are wholly unpredictable and beyond the farmer's control such as labour force emergencies and farm emergencies of fire, storm or flood.

Three types of skilled worker (farm skilled replacement, farm skilled supplementary worker and workers with extra skills) and three degrees of predictability and control give rise to nine combin-
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ations representing different types of labour shortage. Chapter 5 considers how joint action might help to meet each kind of demand. Existing cooperatives, groups and syndicates are described as models for labour sharing groups. Five criteria are used to appraise the alternatives. The object of cooperating in labour use is to increase flexibility of labour supply in response to variable demands. Any labour sharing scheme in a commercial agriculture must combine reliability with economy. Quality of labour, involving skill, experience and responsibility, is an important consideration and in certain situations familiarity could also be an asset.

A worker to replace a regular member of the labour force needs to possess farm skills but he must be more versatile than the average farm worker. Various schemes for providing relief milkers capable of replacing single handed dairy farmers, are compared. One problem for an organisation whose primary aim is to supply relief workers of high calibre, capable of taking over the running of a farm in an emergency, is to balance reliability with economy. Workers must always be available at short notice and yet this expensive labour must not be allowed to stand idle between emergencies. Two ways in which relief labour cooperatives in dairying regions of the Netherlands cope with this problem are to cover several hundred farms per cooperative and to train relief workers in a range of other skills. At the other extreme, groups of two or three farmers make an arrangement with a local self employed relief milker to come to them when required. Here it is the worker himself who provides flexibility.

Other examples considered in this section, including New Zealand, Norwegian and proposed British schemes for supplying dairy relief labour, are geared towards giving the farmer a regular break or providing an extra pair of hands. On balance, schemes involving large numbers of farms probably win on reliability, smaller groups on personal contact and confidence in the relief milker. Costs vary from scheme to scheme, one important consideration being the means of accommodating the relief milker. The 'ideal' scheme has to be tailored to the needs and circumstances of the group concerned.
Seasonal peaks of labour demand call for additional labour to supplement the regular workforce. Labour pooling is a possibility where a group of farms has marked peaks and troughs which are staggered. This is most likely to occur in arable farming. A labour pool could be modelled on the lines of a machinery ring; pooling follows naturally from multi-farm use of machinery. Advantages are that additional labour of known quality is available when required and that profitable employment is found for workers who might otherwise be idle. Questions to be decided at the outset are whether to open the pool to all or to confine it to a small number of similar farms and whether farmers should contribute roughly as much to the pool as they draw out.

Any form of labour pooling which makes use of slack resources instead of drawing on additional workers must be preferred on grounds of cost, worker quality and familiarity. The chief drawback of a pooling arrangement is that when demands are greatest, least labour will be available for the pool. Extra seasonal workers will still be required at certain times. A scheme to supply additional casual labour would seem to be more reliable, in the sense used in Chapter 5, although complete reliability could only be achieved at the expense of holding a large labour force of seasonal workers in reserve. For best results a scheme to recruit seasonal labour might be run in conjunction with a labour pool. A cooperative which supplies members with seasonal workers for fruit picking is described in this section. This cooperative has unique features which make it unlikely that other schemes could be modelled on it.

Provision of extra skills not found in the regular labour force is considered in the final section of Chapter 5. A group may employ an expert like a technologist or a training officer. While experience and skills are necessary qualities for such a worker, self motivation, a strong sense of responsibility, power to improvise and ability to organise his time would also be valuable. One type of specialist often needed on the farm is a mechanic. Some machinery syndicates and farm production groups already employ mechanics. Others
have gone further, equipping the group mechanic with a mobile work-
shop. Specialised machinery and labour teams are described in this
section, which concludes by discussing the possibility that group
members themselves might acquire extra skills.

One aspect of labour cooperation which must not be over-
looked is the reaction of employees. Experience has shown that most
farm workers enjoy the stimulus of working in unfamiliar surroundings,
the companionship of other workers and the challenge of being part of
a team, once they have grown accustomed to it. Even so, employers
should be prepared for resistance to the idea at first. Some workers
are born 'loners' and never take kindly to group schemes. Farm foremen
are inclined to resent any change which appears to undermine their
authority.

While many farms in Britain are partially involved in group
action, few are totally involved. Cooperation in one enterprise does
not automatically lead to other group activities, although Chapter 6
suggests a number of reasons why it could and should. Machinery
syndicates and agricultural training groups are particularly fertile
ground for cultivating new forms of cooperation in labour use.
Marketing groups might also be suitable whereas buying groups might not.
From the training group study came a number of suggestions for better
ways of recruiting, selecting, training, promoting and accommodating
young workers through joint action. Comments were also made about the
feasibility of labour sharing schemes and relief labour cooperatives,
enterprises which might or might not be launched from training groups.
Taking a wider view, labour productivity in the agricultural industry
might be encouraged by group action to promote part time farming and
farm based recreation and tourism.

Chapter 7 focuses on cooperation itself, the aim being to
identify factors which make for successful group action. A model of
a small group is presented which stresses interdependence of the task
and human relationships. The secret of successful group action is to
strike the right balance between accomplishing a task and satisfying more immediate human needs of members. Leadership has to combine task orientation with a 'personal relations' role, which is one good reason for dividing functions of leadership between members.

Groups with a small, homogeneous membership usually find it easier than large, mixed groups to develop an effective network of human relationships. Small, intimate groups tend to be more cohesive than large; cohesive groups achieve more because they can impose greater discipline on members. Small groups are less prone to suffer from breakdown of communications, formation of splinter groups or failure to reach agreement. Smallness has its drawbacks too. For some purposes the wealth of resources, variety of interests and greater critical power of a large, heterogeneous membership can be an advantage.

The final chapter tries to apply lessons from this theoretical model to practical problems of labour sharing in agriculture. It considers how farm production groups come to be formed in the first place, touching on the role of national organisations to disseminate ideas, farmers with first hand experience to inspire others to follow their lead and financial incentives to encourage farmers to invest sooner than they might otherwise have done and with less risk of failure. Pros and cons of grafting a new activity on to an existing farmers' group are considered as well.

Cooperation is not the answer to every farmer's labour problem. Some farm businesses are already large enough to enjoy any economies of scale which group action might offer and others are too small to justify the administrative effort. Experience from Britain and overseas suggests that farmers who join farm production groups are typically from middle-sized farms, younger, better educated and more progressive than the average and with previous experience of cooperation. They tend to be optimistic, confident and oriented to goals of farm expansion. It is suggested that only some ten per cent of British farmers may meet these criteria.
Final points to emphasise are that any labour sharing group should be seen by farmers as their own organisation, growing from the grass roots and not something imposed on them from above. The group should grow naturally from small beginnings, giving members time to gain confidence in one another and the group before tackling more demanding tasks. Every effort should be made to cultivate the human network of personal relationships in the group. A friendly group is not only rewarding in itself; it is likely to be more cohesive and therefore more effective in achieving its goals. Factors making for a close knit group favour the further development of group activities.
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