UNIVERSITY OF NEWCASTLE UPON TYNE

CRE

CENTRE FOR RURAL ECONOMY

THE IMPACT OF THE FOOT AND MOUTH CRISIS ON RURAL FIRMS: A SURVEY OF MICROBUSINESSES IN THE NORTH EAST OF ENGLAND

Katy Bennett
J Phillipson
P Lowe
N Ward

Research Report

UNIVERSITY OF NEWCASTLE

Department of Agricultural Economics and Food Marketing

Centre for Rural Economy

Research Report

THE IMPACT OF THE FOOT AND MOUTH CRISIS ON RURAL FIRMS: A SURVEY OF MICROBUSINESSES IN THE NORTH EAST OF ENGLAND

Katy Bennett
Jeremy Phillipson
Philip Lowe
Neil Ward[1]

Andrew Cattermole[2]
Andrew Donaldson[2]
Craig Elliott[2]
Jane Midgley[2]
Nicola Thompson[3]

April 2001

[1] Senior Lecturer, Department of Geography, University of Newcastle upon Tyne
[2] Ph.D student, Department of Agricultural Economics and Food Marketing, University of Newcastle upon Tyne
[3] Ph.D student, Department of Geography, University of Newcastle upon Tyne

CONTENTS

EXECUTIVE SUMMARY

The Survey Sample

The study provides the first systematic analysis of the impact of the Foot and Mouth outbreak on small rural firms. It derives from a survey of 180 (non-farming) rural microbusinesses (those firms with fewer than 10 employees) and was conducted over the telephone from 3rd - 9th April. The sample was based on a database of 2000 microbusinesses in the North East of England.

The Overall Economic Impact of the Foot and Mouth Crisis

- *On firms:*
    - 28% of firms, high impact (a loss of more than 10% of turnover)
    - 12% of firms, medium impact (a significant adverse effect on the operation of the business but where the loss of turnover has been less than 10%).
    - 59% of firms, little or no impact

- *On rural employment:*

  One in six of the affected firms have reduced their employment due to Foot and Mouth. Most of the losses have been in the hospitality sector, but there have also been losses in recreation and culture, retailing and land-based sectors. The overall effect on employment by rural microbusinesses is a reduction of 8% in full-time employment, 20% in part-time employment and 8% in casual employment.

Sectoral Impacts: The Main Sectors Affected

Hospitality sector

84% of firms have been significantly affected including small B&Bs, hotels and guest houses, caravan parks and public houses. Decreases in turnover range from 15% through to 100% (average 64%). Actual decreases in turnover for March 2001 varied from under £500 through to over £10,000 and averaged at £3,470 per impacted firm.

Recreation and culture

80% of firms have been significantly affected, including several riding schools, a pottery business, photographer, film maker and bird exhibitor. Decreases in turnover range from 30% through to 100% (average 66%). Actual decreases in turnover for March 2001 varied from £1000 through to £5000 and averaged at £3000 per impacted firm.

Land based sector

53% of firms have been significantly affected, including nurseries, agricultural engineers, agricultural hauliers, timber hauliers and boarding kennels. Decreases in turnover range from 5% through to 100% (average 49%). Actual decreases in turnover for March 2001 varied from under £500 through to over £10,000 and averaged at £5,750 per impacted firm.

Transport Sector

50% of firms have been significantly affected, including livestock hauliers, coach companies and removal firms. Decreases in turnover range from 20% through to 33% (average 27%). Actual decreases in turnover for March 2001 varied from £3000 through to over £10,000 and averaged at £7,667 per impacted firm.

Retail Sector

40% of firms have been significantly affected, including antiques shops, village stores, cycle shop, bookshop, jeweller, meat wholesaler and café and restaurant supplier. Mainly they are closely linked to the tourism and agricultural industry, either in supporting these industries or in relying on tourists. Decreases in turnover range from 10% through to 50% (average 30%). Actual decreases in turnover for March 2001 varied from under £500 through to over £10,000 and averaged at £2, 916 per impacted firm.

Impacts According to Location of Firms and their Markets

- The impact is much greater and more severe amongst firms in remote rural areas than in accessible rural areas. The majority of firms in remote rural areas have been hit.
- The greatest impact has been on firms which serve non-local markets (i.e. where more than 75% of their sales come from over 30 miles away).

The Response of Affected Firms

Affected firms have responded in a number of ways to the impact of the crisis on their business. The most common responses pursued or to be considered are: reducing staff working hours (40% of firms); cancelling or postponing investment in premises, stock or machinery (undertaken by 38% of affected firms); cancelling or postponing plans to expand the business (33% of firms); family members working longer hours (32% of firms); and temporarily laying-off staff (29% of firms). A set of responses pursued by a smaller minority (16-20 per cent) of affected firms, include: renegotiating loans or mortgages; increasing marketing or advertising activity; and taking out a loan. A small number of firms are contemplating, or have already responded by: making staff redundant; temporarily closing the business; or attempting to sell the business.

Potential Aid Schemes

Business rate relief is the type of aid most favoured by affected firms, followed by interest rate relief and deferment of tax. There is weaker and less widespread support for other measures such as an extended credit facility, a business development grant, business advice and a financial loan. Given that the end date of the crisis and its effects are unknown, many were unsure of their ability to pay back loans. Only a small number (of the larger, more established firms) felt that such a measure would be appropriate for them.

1. INTRODUCTION

1.1 Background: The Conduct of the Foot and Mouth Crisis

The confirmation on Tuesday 20th February of an outbreak of Foot and Mouth disease at an abattoir in Essex precipitated a widespread crisis for businesses in Britain's rural areas. New cases of the disease were first identified at surrounding farms in Essex, and subsequently at a pig unit at Heddon-on-the-Wall in the North East, thought to be the original source of the epidemic. By 20th March - one month into the crisis - the number of cases had passed 330, with around 25 new ones being confirmed each day. At the time of writing, the total number of cases is reaching 1,400.

During the initial days and weeks of the outbreak, public and political concerns centred on the disruption and economic hardships the disease would bring to the farming industry. The Ministry of Agriculture, Fisheries and Food (MAFF) quickly banned the movement of farm animals on 23rd February and it was announced that all infected animals were to be compulsorily slaughtered. After four years of acute farm incomes problems, and in the wake of the BSE crisis of the 1990s, the outbreak was described as "another hammer blow to Britain's depressed farming industry" (Guardian, 22nd February, p.1).

In seeking to limit the spread of the disease, rural organisations promptly began to cancel events. The Ramblers Association on 22nd February advised its members to cancel country walks in affected counties and stay away from farmland throughout Britain. The National Trust closed many of its properties. All hunting by foxhounds, harriers, beagles and staghounds was suspended, and Ben Gill, President of the National Farmers' Union, said: "The outbreak of Foot and Mouth could become a disaster if people travel into rural areas. Everyone must be vigilant and journeys into the countryside where there is livestock should not take place" (quoted in Guardian, 23 February, p.5). Cancelling a visit to the countryside quickly became not only a responsible contribution to disease control, but also a means of expressing solemn support for a beleaguered industry.

In addition to these voluntary moves by non-governmental organisations, statutory bodies also sought to discourage the public from using the countryside. The 11 National Park Authorities in England and Wales were reported on 24 February to have asked people to "stay away". "All national parks shut down" announced The Independent newspaper. English Heritage closed many of its sites. The Government put in place emergency powers for local authorities to ban the use of footpaths and public rights of way (MAFF Press Release 72/01, 27 February). By early March, it was reported that most rural local authorities had closed their networks of footpaths.

It was two weeks into the crisis before the first reports began to appear in newspapers that set the likely losses faced by the farming industry as a result of Foot and Mouth against the possible economic implications of 'closing' the countryside for other rural businesses dependent on leisure and tourism. By 11th March it was being reported that "tourism is emerging as Britain's biggest loser in the Foot and Mouth crisis with multi-million pound losses far outstripping the costs to the meat trade" (Mendick, 2001, p.6). In response to such concerns and at the prompting of the Countryside Agency, on 13th March the Government established a

Rural Task Force to help address the problems facing the wider rural economy. By early April, the Secretary of State for Culture, Media and Sport, who is responsible for the tourism industry, was reporting declines of 70-80 per cent in earnings from tourism in the areas worst affected. The English Regional Tourist Boards estimated losses of around £200million a week (The Independent, 6th April 2001, p.1).

1.2 The Aims and Objectives of the Investigation

While there have thus been efforts to gauge the impact on tourism, contemporary rural economies are quite diverse and there has been a lack of information on the impact of Foot and Mouth across the board. Rural economies are also made up overwhelmingly of very small firms (some 91 per cent of rural firms are microbusinesses - i.e. they have fewer than ten employees (Countryside Agency 2001)). Much of the anecdotal evidence on the impact of the crisis, though, has focussed on the experience of larger enterprises, such as big visitor attractions and major countryside events. The present investigation was therefore conducted to gather urgently needed information to illuminate the consequences for rural areas overall of the conduct of the Foot and Mouth crisis and to inform decisions about remedial measures.

Thus, the objective of the investigation was to gauge the pattern and degree of the impact of the Foot and Mouth crisis on the wider, non-agricultural, rural economy, focussing on the effects on the microbusinesses that comprise the vast majority of rural firms. The intention was to produce a balanced assessment. The following were the specific aims of the investigation:

- to identify the scale and the extent of the impact across different sectors of the rural economy (including sectors likely to be little affected);
- to examine how affected firms are responding to the crisis;
- to identify what forms of aid measures could ease the short-term problems that affected firms face.

A survey was conducted of a sample of 180 rural microbusinesses drawing on a database of 2000 microbusinesses in the North East of England held by the Centre for Rural Economy (Raley and Moxey, 2000).

1.3 Context of the Investigation

The Foot and Mouth disease has had a specific regional geography, in terms of its direct impact on the agricultural sector. Cumbria, Dumfries and Galloway and Devon are the counties worst affected (accounting for some 64 per cent of the total cases). Table 1 shows the distribution of confirmed cases by region at the time of our investigation. The disease has largely been spread by livestock (mainly sheep) movements with the consequence that its main incidence has been the pastoral farming areas in the north and west of the country. The impact on rural economies has been more widespread and indiscriminate. It has depended crucially on the way the authorities have handled the disease and the way the media have portrayed it, and then the response to these of an array of organisations, businesses and the public.

There is potentially a multitude of ways in which the Foot and Mouth crisis may impact on a business, including less passing trade; fewer tourists and visitors; the determent of customers; restrictions in accessing land, farms or other business premises; and practical difficulties for staff getting to work or doing their jobs.

Table 1: The Regional Distribution of Cases of Foot and Mouth in Britain in early April

Region	*Number of cases*	*Percentage of Total Cases*
North West	476	42.8
South West	179	16.1
Scotland	138	12.4
West Midlands	111	10.0
North East	103	9.3
Wales	59	5.3
Yorkshire & Humberside	14	1.3
East Midlands	12	1.1
Eastern England	10	0.9
South East	9	0.8
Total	1111	100 per cent

Source: MAFF web page. Confirmed cases as at 18:00 7th April 2001

Such factors will combine in varied and specific ways. There may also be positive effects. In certain circumstances, for example, increased local custom may partly offset the loss of tourist trade. The most general effect on firms in the short-term is likely to be changes in their turnover, but there may also be disruption to their operations or supply chains and loss of pending business through the cancellation of orders or bookings. There are then likely to be varied, second-order effects as affected firms respond to the altered market conditions and prospects, through, say, changes in staff numbers or working hours, cancelling or postponing orders or investments, delaying or defaulting on payments and altering their business plans. There are consequences also for the well-being of business owners and their employees, and their households and their communities.

The intention of the survey was to collect systematic information on the short-term effects on, and response of, rural firms. The findings are clearly contingent, and must be considered in the context of where and when they were collected.

The sample of rural firms was drawn from a database of microbusinesses in the North East of England. The outbreak is thought to have started in this region. On 7th April, the region accounted for 103 cases of Foot and Mouth, representing 9.3 per cent of the national total. Most of the region was covered by restrictions on animal movements.

The rural economy of the North East, as elsewhere, has suffered a substantial reduction in primary employment over recent decades (Whitby et al.1999). Between 1971 and 1996 regional employment in the energy and water sector fell by 83 per cent and in agriculture and fishing by 38 per cent. Decline in these sectors has been offset by growth in light industry and services. While agriculture and fishing now account for only 9 per cent of rural employment in the region, manufacturing accounts for 19 per cent, retail, wholesale and repair for 12 per cent and hotels and catering for 7 per cent. The rural economy of the region remains weak and is characterised by low wages, low rates of formation of new firms, and pockets of unemployment and low activity rates (Whitby et al. 1999).

The timing of the survey must also be borne in mind. It was conducted seven weeks into the crisis at a moment when there was no clear sight of its ending. The survey was conducted just a week before Easter, which is the start of the visitor period for most of the rural businesses that rely on tourists or day-trippers. At the time, though, most of the public rights of way and the major visitor attractions (National Trust sites, country parks, National Park visitor centres) in the North East countryside were closed.

1.4 Methodology

The sample frame for the investigation was CRE's database of 2000 rural microbusinesses which was derived from a major postal survey undertaken in 1999 and 2000 in the North East of England. Firms were chosen from the 1300 non-farm businesses in the database on a random sample basis, stratified by sector. The sectors were weighted to ensure sufficient numbers of firms were covered in the different sectors that comprise the wider rural economy.[1] In all, interviews were conducted with 180 firms. Annex 1 gives details of the characteristics of the sample: it includes a good spread of businesses in terms of their sector, location and turnover.

The interviews were done over the telephone. This was primarily because of the need for rapid results, but also to avoid any difficulties in accessing business premises that face-to-face interviews might have entailed, or the likely poor response rate of unaffected businesses to a postal survey. The work was conducted by a team of eight researchers at the CRE, from 3rd- 9th April. The interviews collected both quantitative and qualitative data, and were taped. The number of researchers involved

---

[1] For some of this analysis, and this is clearly indicated, the statistics have been recalibrated - i.e. the weighting has been removed - against the distribution of firms within the original database, in order to give a more accurate reflection of the effects on the rural economy of the region.

enabled substantial and detailed material to be amassed over a very short period of time, with businesses contacted at approximately the same point of the crisis, thus providing a clear snapshot. Whilst the quantitative data provides a picture of the numbers and types of businesses affected, the qualitative material provides essential contextual information and captures some of the personal turmoil caused by the crisis.

The interview schedule, see Annex 2, touched on a range of themes, including economic and social impacts, business coping strategies, recourse to advisory sources, as well as potential institutional responses to the outbreak. It included a balance of closed and open questions to explore both the quantitative and qualitative impacts on businesses. The research team, however, anticipated (correctly) that it would be difficult to obtain precise economic data over the telephone, either due to business owners not having this to hand, or general unwillingness to divulge this type of information. It is also not straightforward to disentangle the impacts of Foot and Mouth from other contemporary influences on a business or upon the general trajectory of business development. However, the inclusion in the survey of many firms that turned out not to have been affected by the crisis has permitted internal cross-comparisons within the analysis which has allowed a more precise appraisal of the specific effects of Foot and Mouth.

2. THE OVERALL ECONOMIC IMPACT OF THE CRISIS

2.1 Impact on Rural Firms

All the businesses were categorised as to whether they had suffered to date a high impact, a medium impact or little/no impact from the Foot and Mouth crisis. The classification was constructed on the following basis:

- *high impact businesses* are those which have suffered a loss of more than 10 per cent in turnover;
- *medium impact businesses* are those where there has been a significant adverse effect on their operations but where the loss of turnover has been less than 10 per cent;
- *little/no impact businesses* includes enterprises as yet unaffected by Foot and Mouth or only superficially affected (e.g. disinfecting footwear or minor access inconvenience). This group included some businesses which reported that loss of tourist trade had been offset by increased local custom.

The classification does not take account of possible future impacts nor the wider social impacts on small business owners or their households.

In all, based on the classification, 59 per cent of business were little or not affected by Foot and Mouth at the time of the survey, 12 per cent were medium impact and 28 per cent were high impact[2]. One additional business had been positively affected by the outbreak; this was a firm

[2] Figures recalibrated to sectoral composition of sample frame.

engaged in transporting road materials for improving access to farms engaged in carcass disposal.

2.2 The Response of Affected Firms

Affected firms have responded in a number of ways to the impact of the crisis on their business. Table 2 details the steps they have already pursued or will soon consider. The most common responses, undertaken by about 30-40 per cent of affected firms, include: cancelling or postponing investment in premises, stock or machinery; reducing staff working hours; family members working longer hours; cancelling or postponing plans to expand the business; and temporarily laying-off staff. Then there is a set of responses pursued by a smaller minority (16-20 per cent) of affected firms, including: renegotiating loans or mortgages; increasing marketing or advertising activity; and taking out a loan. Finally, a small number of firms (9-13 per cent) are contemplating, or have already responded by: making staff redundant; temporarily closing the business; or attempting to sell the business.

Table 2: Firms' Coping Responses

	Already pursued %	*Soon consider* %
Cancel/postpone investment in premises/stock/machinery	31	7
Reduce staff working hours	30	10
Family members working longer hours	29	3
Cancel/postpone plans to expand business	24	9
Temporary laying-off staff	19	10
Renegotiate loans or mortgage	13	7
Increase marketing or advertising activity	13	7
Take out loan	10	6
Make staff redundant	7	6
Temporarily closing the business	3	6
Attempt to sell the business	-	9

2.3 Impact on Rural Employment

One in six of the significantly affected firms (i.e. the medium and high impact ones) have reduced their employment, due to Foot and Mouth. Table 3 shows part-time, full-time and casual employment changes. This includes employees who have been laid off temporarily or permanently as well as those seasonal workers who have simply not been taken on in the light of the outbreak. Most of the losses by far have been in the hospitality sector, but there have also been losses in recreation and culture, retailing and land-based sectors. The overall effect on employment by rural microbusinesses (i.e. recalibrated to the sample frame) is an estimated reduction of 8 per cent in full-time employment, 20 per cent in part-time employment and 8 per cent in casual employment.

Table 3: Employment losses due to Foot and Mouth in the Interview Sample

	Full time	*Part time*	*Casual*
Land based	0	0	1.8
Retail	1.4	0	0
Hospitality	7.8	29.9	5.2
Recreation and culture	1	0	0

Figures recalibrated to sectoral composition of sample frame.

2.4 Patterns of Impact

The pattern of effects of the Foot and Mouth crisis on rural microbusinesses has sectoral, geographical and temporal dimensions. It is clear, for example, that particular sectors have been more affected than others. Not so obvious, however, have been the geographical and temporal implications of the crisis. Some of the subtleties at work here are explored in the sections below.

3. SECTORAL IMPACTS

3.1 Overview of Affected Sectors

The sectoral profile of the impact of Foot and Mouth on the rural microbusinesses is presented in Table 4. The worst hit sector is hospitality, with 83 per cent of the firms significantly affected, including 67 per cent in the high impact category. Other sectors heavily affected include: recreation and culture (with 80 per cent of firms significantly affected); land-based (53 per cent); transport (50%); and retailing (40%). In most cases, the affected firms in each of these sectors are high impact. In the remaining sectors of the rural economy (manufacturing, personal services, education and training, business services, construction, and health and social services), odd firms have been significantly affected, mostly with medium impact. These are mainly firms that supply goods or services to the heavily affected sectors, and are seeing a downturn in orders.

Table 4: Percentage of Firms Affected, by Sector

	High impact %	*Medium impact %*
Hospitality	67	17
Recreation and culture	50	30
Land based	40	13
Transport	30	20
Retail	30	10
Manufacturing	10	15
Personal services	10	-
Educational and training	10	-
Business services	5	5
Construction	-	13
Health and Social	-	10

The heavily affected sectors are reviewed in turn below.

3.2 Hospitality Sector

The hospitality sector has been the most heavily impacted, as a result of a major reduction in domestic and overseas visitor numbers into rural areas. The hospitality sector is, however, highly segmented and the impacts are differentiated. The types of business significantly affected include small B&Bs, hotels and guest houses, caravan parks and public houses. Decreases in turnover range from 15 per cent through to 100 per cent (average 64 per cent). Actual decreases in turnover for March 2001 varied from under £500 through to over £10,000, and averaged at £3,470 per impacted firm. The economic effects are often complicated and differentially felt across different parts of a business (i.e. food, accommodation, B&B, holiday cottage). The impact is also being felt across both 'full-time' businesses and 'part-time' businesses (that may contribute only a minor part of household incomes).

With the outbreak occurring at the onset of the main tourism season, accommodation providers have faced major reductions in bookings and enquiries and high levels of cancellations for the upcoming months. Many had written off Easter and were growing concerned at the prospects for the Summer. For other hospitality businesses, notably public houses and inns, firms have been affected through reduced passing trade and fewer day visitors. Some firms are identifying increased costs of supplies to their business, notably of fresh meat. The firms least affected by the downturn are those who can rely on a more regular or local customer base. Some businesses in coastal areas appear to have partly been sheltered from the most severe impacts. For others, Foot and Mouth has come at a time when their business is yet to open, and it is therefore too early to identify any effects.

Many hospitality businesses have already responded to the outbreak in a range of ways as highlighted in Table 5. Most common have been strategies based on a reduction in staff working hours. Many tourism businesses have already invested significant sums in advertising and marketing for 2001 and now consider this investment to have been wasted. In the present economic climate, they are often unwilling or unable to reinvest in these forms of activity.

Table 5: Top Coping Responses by Sector*

Sector	*Coping response*
Hospitality	Reduce staff working hours (44%) Family members working longer hours (36%) Cancel or postpone investment (36%) Temporary laying-off staff (32%)
Recreation and Culture	Family members working longer hours (50%) Renegotiate loans or mortgage (50%) Cancel or postpone investment (50%) Cancel or postpone plans to expand business (50%)
Land-based	Temporary laying-off staff (63%) Reduce staff working hours (63%) Family members working longer hours (63%) Cancel or postpone plans to expand business (50%)
Transport	Reduce staff working hours (60%) Cancel or postpone plans to expand business (40%) Temporary laying-off staff (40%) Make staff redundant (40%)
Retail	Reduce staff working hours (33%) Cancel or postpone investment (25%) Increase marketing (25%)

*Percentages refer to the proportion of affected firms in that sector who have taken or are soon to consider taking the particular action.

3.3 Recreation and Culture

Impacted firms within the recreation and culture sector include several riding schools, a pottery business, photographer, film maker and bird exhibitor. Decreases in turnover range from 30 per cent through to 100 per cent (average 66 per cent). Actual decreases in turnover for March

2001 varied from £1000 through to £5000 and averaged at £3000 per impacted firm. Riding schools appear to be undergoing particular difficulties with reduced customer numbers, restrictions on the movement of horses and increased costs of supplies (notably hay and straw). Recreation and culture firms have adopted several coping strategies in response to the outbreak. In particular some are reconsidering future investment and expansion plans and the re-negotiation of loans and mortgages.

3.4 Land-based Sector

The predominantly rural location of the land-based sector, and its often close relationship to farming, means that it is a sector which has been significantly affected by Foot and Mouth. The categories of business impacted upon include nurseries, agricultural engineers, agricultural hauliers, timber hauliers and boarding kennels. Decreases in turnover range from 5 per cent through to 100 per cent (average 49 per cent). Actual decreases in turnover for March 2001 varied from under £500 through to over £10,000 and averaged at £5,750 per impacted firm. Many land-based businesses have seen their customer base within the farming community disappear. There is a significantly reduced demand for livestock transport or, in the case of timber hauliers, fencing materials. Land-based businesses are often located close to or on farms, and for many this is posing access difficulties and raised costs associated with disinfection activity. Other businesses, notably nurseries and boarding kennels, are suffering from a reduction in tourism visitors. In general, land-based businesses are implementing a range of coping strategies, and responses entailing a reduction in staff working hours are particularly significant.

3.5 Transport Sector

On the back of a difficult period for the transport sector relating to the 'fuel crisis', many firms are being heavily affected by Foot and Mouth. Impacted firms within the transport sector include livestock hauliers, coach companies and removal firms. Decreases in turnover range from 20 per cent through to 33 per cent (average 27 per cent). Actual decreases in turnover for March 2001 varied from £3000 through to over £10,000 and averaged at £7,667 per impacted firm. The most significant impacts are being felt where the business is closely related to agriculture given the reductions in livestock transport. As a result, some hauliers are shifting the focus of their efforts to new cargoes such as aggregates and fertilisers. Private hire coach companies are also being affected, particularly those serving the tourism market, though there are indications that some coach firms are simply switching destinations in order to cope with the outbreak. Other coping responses to the crisis commonly relate to a reduction in staff working hours. In contrast to the other impacted sectors, staff redundancy also features among the top four coping strategies. Transport firms less affected - those primarily not dealing with livestock or tourists - are facing some route changes and thus marginal increases in costs.

3.6 Retail Sector

Impacted firms within the retail sector are very varied, including antiques shops, village stores, bookshops, jewelers, meat wholesalers and café and restaurant suppliers. Decreases in turnover range from 10 per cent through to 50 per cent (average 30 per cent). Actual decreases in turnover for March 2001 varied from under £500 through to over £10,000 and averaged at £2,916 per impacted firm. Impacted businesses are typically those reliant on tourists or passing trade as an important part of their customer base. Those with mainly a core local or regular clientele are generally less heavily affected. In a number of instances declining numbers of tourist customers are being partially offset by increased local trade. Other retail businesses are suffering from a reduction in farm customers. There are widespread reports of rural service centres across the region being especially quiet with fewer visitors from surrounding rural areas and beyond. As for other sectors, many retail businesses are responding to the crisis with various coping responses. Retail, however, is the only sector where increased marketing activity is being given particular priority.

4. GEOGRAPHICAL IMPACTS

4.1 Overview of Impacts on Rural Areas

The results of the study present a complex picture of the geographical impact of the crisis. On the one hand, the most specific impacts on certain firms have come from direct movement restrictions related to the control of the disease. On the other hand, the blanket public response of staying away from the countryside has affected swathes of firms in ways that bears little relationship to the geography of the disease but more to the firms' position in supply chains and the nature and geography of their customer base. In between these two broad structuring factors, a microgeography seems evident whereby the discouragement of visitors and the shrinkage of demand has had a distinct spatial impact within the region which relates to the accessibility of places and premises.

4.2 Operational Restrictions

Working within infected and controlled areas has had repercussions for many businesses. The practical restrictions and precautions on movement have affected specific groups of firms, particularly those involved in transport, those that require access to land, including firms in the land-based and recreational sectors, and those whose premises are on farms. A considerable number of man hours have had to be diverted into taking precautions against spreading the disease, through, for example, the thorough disinfection of tyres and the re-routing of journeys for haulage firms. Such measures have meant additional costs for these businesses on top of the more obvious, direct repercussions of the crisis for those haulage firms that specialise in livestock.

In a few cases, operational restrictions because of the disease are having very serious effects on businesses. An example is a riding school, a significant part of whose income is reliant upon clients bringing their own horses and ponies to the school:

> So people coming in for private lessons on their own horses haven't been able to come. A lot of them keep their horses on farms so ethically they can't really take their horse out of the farm, bring it somewhere strange and then take it back again. And the same with horses that were coming to be broken in - most people who breed horses have some form of stock, or are surrounded by it, as we are, so it's mostly the business related to people who own their own horse and have training on them. (Riding school owner, near Hartlepool)

The research also revealed examples of businesses located on farms and unable to access their premises. This has been the case for a parachute business that has experienced a 100 per cent loss in its sales revenue since the crisis began:

> The business has been shut for about seven weeks. It's had a huge impact on us because we can't do anything. The airfield is also part of an active working farm that has cattle and sheep on it. Foot and Mouth isn't actually on the farm but the farmer doesn't want to risk it so he's closed access to the airfield completely, so nobody can come on, so we can't operate. (Parachute business owner)

4.3 The Impact on Supply Chains and the Geography of a Firm's Customer Base

The immediate response of closing the countryside to the public at the onset of the outbreak, coupled with media images of the mass slaughter, burning and burial of animals have had the general effect of discouraging visitors to the region and to the countryside, with consequences for all businesses that depend on such visitors whether directly or indirectly. A number of business owners particularly in the hospitality sector commented on how Foot and Mouth had blighted the image of the countryside with obvious damage to their business:

> My customers are nervous of coming and the people from the town come to a dream. They come out to the countryside because it's nice and lovely and they see the animals. They come because it's a nice relaxing place to be and it gets them away from the big nasty city. That little bubble tends to get tarnished when you get situations like this. (Caravan park owner, Tyne Valley)

Most affected are those sectors that sell directly to the public, namely hospitality, recreational and retailing. However, much then depends upon the location of a firm's customer base. As Table 6 shows, the greatest impact has been on firms which serve non-local markets (i.e. where more than 75 per cent of their sales come from over 30 miles away).

Table 6: Impact According to Dependency on Local or Non-Local Markets*

	High Impact %	*Medium Impact* %	*No/Little Impact* %
Local market orientation (i.e. firms with more than 75 per cent of sales within 30 miles)	15	16	69
Non-local market orientation (i.e. firms with more than 75 per cent of sales over 30 miles)	39	7	53

*Figures have been recalibrated to sectoral composition of sample frame.

One Bed and Breakfast owner dependent on visitors to the region commented:

> I believe that the general public have the wrong image. I've had Americans staying the last two weeks and the media coverage in America - they came here expecting to be wading knee-high through disinfected straw; they expected to be put through some sort of fumigation at the airport when they left to go back to America- you know, stupid things. What also annoyed me, they did show on the TV a news clip from America where that had a red spot on Heddon on the Wall - they radiated the red spot around the area and it included Scotland…nowhere near. The media have blown it all out of proportion and you would think it was human Foot and Mouth that was being carried not animal. I feel that the general public are saying we'll just stay at home, not go to the countryside. Not that they're going to pass it on to anything which is what really amazes me. Unless they live in a rural area, they're not really a threat, if they can't leave, what's to stop them coming up here. They're not going to take it back to a cow in Leeds. I think it's scared the general public because of the initial way it was treated "Do not come near us, keep away, we have got the plague. (B&B owner, Wooler)

Those firms that do not deal with the public have not been directly affected by the shunning of the countryside. This is typically the case in sectors such as transport, manufacturing and business services but is not true of all firms in these sectors, as the following contrasting remarks from two manufacturers reveal:

> Foot and Mouth hasn't affected me in that I'm not a typical business in that my trade is all done by post, telephone, fax and email. Because the public very rarely comes to see me anyway, Foot and Mouth hasn't impacted. (Manufacturer, North Pennines)

> Well, if we don't get people coming through placing orders, we're going to have no work, work will have dried up. It's an on-going thing when you're manufacturing like we're doing, to customers' specifications, because that's what we do….we sell everything from our showroom here and we're only a small business and everything we make basically is hand made to order. It's not as if we can say we can ship so and so down country. We rely on people coming to place orders. (Manufacturer, mid-Northumberland)

Some firms that do not deal with the public as their customers and are not significantly affected by movement restrictions have still been adversely affected by the crisis. These typically are ones that are embedded in rural supply chains, serving, say, the agricultural or tourist sectors. They include haulage firms, agricultural engineering and services firms and specialist manufacturers. One craft manufacturer commented:

> We supply china gift ware basically into tourist areas especially into areas, because we have a Celtic theme, into rural Wales and North Northumberland and so on - and the most dramatic effect is that basically since the first news of the outbreak broke we - it's quite seasonal and normally the run up to Easter is a very busy time of year for us because a lot of our shops are taking in their first orders for Easter or if beyond that they are placing orders for delivery in May. But what has happened is that normally we acquire orders from trade fairs at the back end of last year and at the beginning of this but then that is always supplemented by orders coming in. Basically since the announcement of the out break we have not had a single order placed. Normally at this time I am usually looking at in excess of £10, 000 worth of business. It is only £300. (Manufacturer, Tyne Valley)

4.4 Sub-regional Spatial Impacts

The discouragement of visitors and the reduction in demand has had a distinct spatial impact within the region which relates to the accessibility of places and businesses. As Table 7 shows the impact has been much greater and more severe amongst firms in remote rural areas than in accessible rural areas (see also Figure 1). Almost two-thirds of the firms in the remote rural areas have been significantly impacted by the Foot and Mouth crisis.

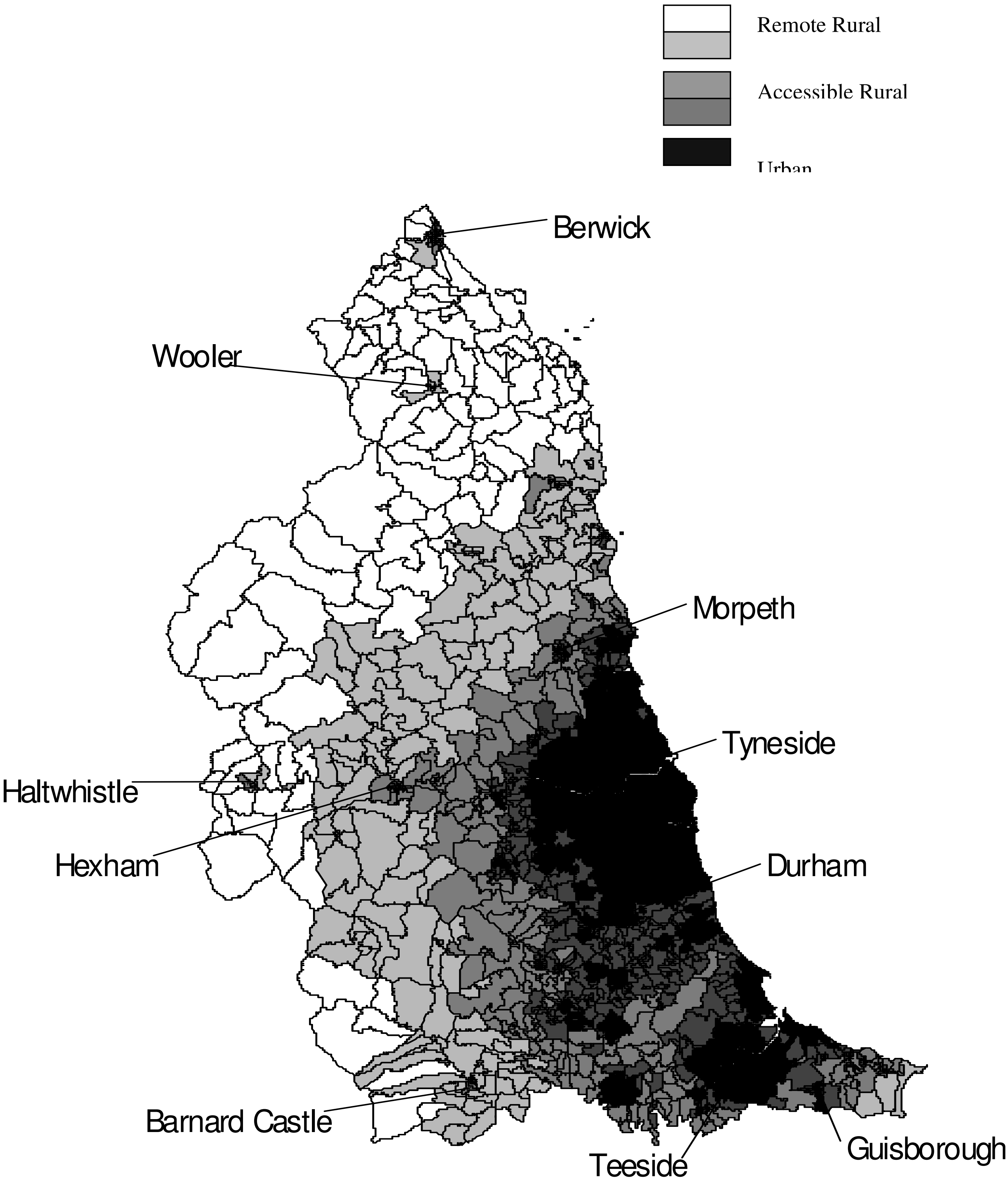
Table 7: Geographical Impacts: Percentage of Firms Affected by Geographical Zone*

	High Impact %	*Medium Impact* %	*No/Little Impact* %
Remote rural	18	7	14
Accessible rural	11	6	46

* Figures have been recalibrated by sector stratification to sectoral composition of sample frame.

The pattern of impact often displays a micro-geography relating to levels of accessibility. A business on a major rural thoroughfare is typically less severely affected than one off the beaten track, even in the same locale. Other businesses, including retail outlets, strategically located on routes leading to key tourist destinations or visitor attractions, have experienced a significant reduction in passing trade. A Bed and Breakfast establishment had seen its takings decline precipitously following the closure of Beamish Museum.

Figure 1: Remote and Accessible Rural Areas



However, some neighbouring firms in the same sector are being differentially affected due to the nature of their distinct market shares. On Holy Island, for instance, the research revealed two tourism accommodation providers experiencing very different effects of the crisis. Whilst one continues to capture family and individual bookings (attracted by the coastal setting, even though there are access restrictions in force on the island), the other with a client base of larger organised groups has suffered many cancellations and a severe decline in the number of bookings.

5. TEMPORAL IMPACTS

There are temporal factors influencing the impact of the Foot and Mouth crisis on rural microbusinesses. Some businesses have been hit since the crisis began. For the majority, however, Easter marks the time when trade is expected to pick up considerably after the winter months, and many of those firms were beginning to feel the effects of the crisis and to contemplate the prospects of much reduced trade in the weeks and months to come. Then there are likely to be knock-on and induced impacts within supply chains as affected firms reduce their supplies. Finally, there may be long-term impacts if firms close or have to alter their business plans.

5.1 Immediate Impact

Businesses immediately affected by the outbreak include those servicing farms, including hauliers (especially those specialising in livestock) and agricultural engineering companies; businesses located on farms suffering access restrictions; and businesses set up to service the visitor market out of season. For instance, a birds of prey centre lost the majority of its bookings with the onset of the crisis: in an attempt to balance its books, the centre has laid off one full-time member of staff despite having to continue to care for over eighty birds.

Accommodation providers, open throughout the year, such as hotels, have already lost a considerable amount of custom. A hotel in Alnwick, for example, drops its rates in March and is usually very busy. In March 2001 its sales revenue was only £11000, down 35% on the previous year. To date, the hotel owner has not laid off any staff, most of whom have worked at the hotel for a long time, but will not be taking on casual labour over Easter and is very concerned as to how long he will be able to keep on current staff. Smaller accommodation providers have also been immediately affected:

> The phone stopped ringing, the day Foot and Mouth was announced, for enquiries and bookings. (B&B/Holiday cottage owner, Barnard Castle)

However, smaller accommodation providers mainly state that they are busy at weekends in March, rather than throughout the week. This changes from Easter onwards, when they are normally busy during the week as well.

5.2 Worse to Come?

The worst of the impact for accommodation providers and other businesses dependent upon tourist visits, however, is thought still to come. It is important to note that the research provides a snap shot of a region at a particular moment, just prior to the onset of the Easter holidays. Easter is a peak time for these businesses and reduced trade will be detrimental to their cash flow. It is also a major time for receiving bookings for later in the year and these are uniformly depressed.

> It is very early days to judge what your loss is going to be, I think our greatest loss is going to be in the next three months. After all in March there is not a lot of tourism anyway, there is not a lot of activity in B&B establishments in March except in the Lake District, certainly not in Northumberland. It only picks up in the week before Easter which we are just coming to now, so it is only now that it is going to start biting (B&B, Hexham).

There are real concerns for the medium-term if the Foot and Mouth crisis persists and continues to discourage visitors from taking trips to the countryside or tourists from making bookings. Most businesses are watching and waiting and concerned about a lack of income over the late Spring and Summer months when most of their earnings are usually expected:

> Our problem is building up a pot to get us through the following winter. (Garden Centre)

> We need for it to start picking up by Easter. We have the type of business where we make absolutely no money through the winter, it costs to be open if you know what we mean. We are just providing a service for the locals really and you need to make some money in the summer to keep you going in the winter. Believe me, the winters are far longer than the summer. (Pub/Restaurant, Alnwick)

> It's almost seasonal here because we rely on the summer to get that little bit extra of trade to keep us through the winter — but if the caravaners don't come then we're all up shit creek really aren't we? (Bakery, South Northumberland Coast)

5.3 Knock-on and Induced Impacts

When affected firms were asked how they were responding to the Foot and Mouth crisis there were differences between sectors as to whether adaptive actions had already been taken or were in prospect. Firms in the hospitality, retailing and recreation and cultural sectors had mainly already taken what steps they could (cancelling orders, reducing staff hours, etc.). In contrast, firms in the construction and manufacturing sectors were contemplating what steps they would need to take as their order books shrunk in turn. Thus, whilst some businesses, particularly in these sectors, record no decline in their current income whilst they meet a backlog in demand, they have noticed a decline in the orders coming through which may have considerable implications for future production and cash-flow.

> At the minute we're working on orders most of which we got last year or at the early part of the year. We do have money coming in but it is just from existing work….In terms of visitors or sales off the shelves, our sales are down by eighty percent. And the odd person who is coming in is not buying anything. We do have money coming in, but it is just from the existing work. Presumably if no-one walks over the doorstep by this time next year - basically over the summer - if people don't come we are finished or we'll find another way of doing it, but we will not be able to exist as we are existing now….I've sold two pots in the last two weeks. It's like a tap that's been turned off. (Pottery business, North Northumberland).

Demand is down as other businesses rein in their spend and goods are not sold from premises located in the countryside. A wider array of businesses will soon begin to be affected as local firms, households and redundant employees reduce their spending and overall demand falls in the rural economy. The local economies facing the clearest prospect of recession are in the remote rural areas where a majority of the microbusinesses have already been hit (see Table 7).

5.4 Lasting Impact

There are concerns, particularly among the smaller firms, that it will take several years to recover from the crisis. This is especially the case for those that have recently invested in their business:

> I only have three weeks booked in the summer. I did it all new last year and I owe £20,000 – I'm not going to get anything back. (Holiday cottage owner, Wooler)

In addition, it has already been highlighted that many firms are taking decisions to cancel their plans concerning investment and expansion. Indeed, 61% of the firms negatively affected by the crisis had expressed interest in growth when previously surveyed in 1999/2000. Of these firms 37% have cancelled investment and 26% have postponed plans to expand. The Foot and Mouth outbreak would therefore seem to be significantly affecting the longer term growth trajectory of affected rural enterprises.

Firms included within the survey are clearly at different stages in their development ranging from long established firms to those only recently formed. An important temporal issue would appear to be the length of time that firms have been in business and this could have repercussions for responses and survival. New firms will already have been encountering the difficult challenges facing any new business in its first few years. None of them had anticipated the sort of disruption brought about by the Foot and Mouth crisis in their business planning, and there were concerns over whether they could cope. Longer established businesses experiencing a downturn in their sales revenue tended to be more certain that they would somehow survive the crisis.

Established businesses, however, had different degrees of vitality as they entered the Foot and Mouth crisis and this is likely to influence their resilience and ability to recover. Some had already been struggling. Indeed, 36% of impacted businesses had stated in 1999/2000 that profits then were insufficient to renew equipment or refurbish premises.

6. SOCIAL IMPLICATIONS

6.1 Impact on Rural Communities

Whether or not individuals have been financially affected by the Foot and Mouth crisis, many have reported on the effect that it has had on their communities. People have referred to how the crisis has impacted upon their social lives and leisure activities, how they are unable to walk their dogs, visit farming friends and relatives, ride, fish, go mountain biking, run their mini and youth rugby sides, go caravanning and run Duke of Edinburgh activities. People talked about how they felt trapped and unable to get out. Fear of spreading the disease caused them to police their own movements, deepening feelings of confinement.

> The community doesn't particularly want to meet and socialise in case they spread the outbreak. There's a lot of suspicion as to how this virus spread and so everyone's taking precautions so that it doesn't spread via their activities. (Surveyor, Barnard Castle)

There is considerable watching and waiting in the countryside as people monitor the advance of the disease, referring to the way in which it "creeps" up on localities.

Many respondents talked about how abnormally quiet their villages and localities were, with fewer visitors in the area and the cancellation of local activities.

> Everybody's very depressed because all the footpaths are closed and there's nobody around - and all the farmers, we know them very well and they're all very worried. (B&B/Holiday, cottage Barnard Castle)

The local pub continued to be a meeting point for some, although the Foot and Mouth crisis dominated conversation.

> People I drink with in the pub — it's a constant topic of conversation — farmers and non-farmers alike have been talking about it most of the time. (Computer Software Designer)

6.2 No Escape

In short, there was a strong sense that there was no escape from the disease, with its physical presence threatening communities, its representation invading homes and its constancy in conversation. Almost everyone was keen to have their thoughts on the handling of the crisis recorded and many expressed opinions on how the disease originated and spread. At this point it is important to note the conflicting and contradictory knowledge of the disease, reflecting the array of media messages bombarding people everyday in their homes and the different ways in which these are digested and further discussed. Images of animals being slaughtered and their carcasses burnt has caused several respondents considerable angst. Inability to escape this grasp of the disease was wearing people down and one respondent, talking about a recent visit to Glasgow, expressed the relief he felt when he walked into a pub and no one around him was discussing the crisis.

There are further concerns for those directly witnessing the impact of the disease, with repercussions for their households. Some reported seeing the burning of carcasses and the resulting stench that invaded their homes; others, the empty neighbouring fields that their houses overlooked where the disease had struck farms.

> It’s when it’s on your doorstep and you can see it that it starts hitting you a bit. We’re looking onto sheep and cows all day here — obviously the fields are empty now and it looks like they’re going to be for a number of months. (Manufacturer, mid-Durham)

> I mean we’re fairly friendly with the local farmers here - I was just talking to the chap in fact who’s having his sheep slaughtered now … we’re looking at the farm here now - he has now got it obviously which is a shame. We’re not looking forward - let’s hope these carcasses don’t lie here for ten days like a lot of people have been saying they’ve had the problem. I hope we don’t have that because it’s right on our boundary here. No very pleasant. (Manufacturer, mid-Northumberland)

> I think it’s effected everyone in this area - the stench - everybody in this area has been involved emotionally and affected environmentally … Morale in the village is low because of the burning of carcasses … It hits home when you can smell it in your house, it was awful. (Computer Software Designer)

6.3 Stress at Home and Work

For those financially affected by the crisis, worries were taken home with them and households and family members absorbed some of the stress. Household spending has had to be carefully monitored for those experiencing or predicting a decline in income. A recurring theme was the cancellation of family holidays. Business owners were particularly worried about the repercussions of laying off staff and the problems this will cause. Many employers have worked alongside employees for several years and know them and their families well. For those that have laid off staff, longer hours are being worked. This is sometimes not to do productive work, but a matter of waiting by the phone should it ring with an order or a booking. It is the waiting and not knowing when the crisis is going to end that is really causing business owners grievance:

> The worry of it all, keeping the business going as well as my family as well. Worrying about the staff and their families. (Pub owner, Tyne Valley)

> It's affected our daily life in that at this time of year we're booked up anyway. So we're a bit free. But at the moment we're tending to stay by the phone just in case somebody might ring. (B&B, North Durham)

As a method, telephone interviews are usually fairly impersonal. A striking feature of this research, however, was the willingness of respondents to talk, with a few individuals wanting to speak of the emotional and psychological effect that the crisis has had on them:

> Put it this way it gets you psychologically…. You can't sleep on a night. I've had nightmares of sheep rolling off the fire at us believe it or not. It does get to you. (Haulier, mid-Durham)

7. INSTITUTIONAL ISSUES

7.1 Sources of Help or Advice

In response to the Foot and Mouth outbreak rural microbusiness owners affected by the crisis have turned to familiar sources of advice (see Table 8). Informal sources of support were the most popular. These were family and friends. Of the public sources of support available the Tourist Board (especially for hospitality firms) and Local Authorities were turned to most during the crisis. Private sources of support, including banks and accountants, were also important for many, representing another familiar source of advice. Other potential forms of support were much less used, particularly faceless help lines, trade organisations and various agencies which were little known. Many respondents were confused by the array of potential advice available and desperate for help from one source. With the possible exception of family and friends there was a mixture of opinion as to how helpful or supportive more formal sources of advice, particularly banks, had been. Only a small minority of business owners had approached specific help lines set up by central government.

Table 8: Sources of Help or Advice used by Affected Firms

	% of affected firms
Family members	31
Friends	29
Council/local authority	27
Tourist Board	21
Banks	16
Accountants/financial advisers	16
MAFF	14
MP	13
Business Link	12
Federation of Small Businesses	10
Citizens Advice Bureau	10
Tax Helpline	9

Other: Trade Association, Chamber of Commerce, Countryside Agency, Rural Stress Information Network.

7.2 Potential Support Measures

The affected firms also indicated what sorts of aid would be helpful to them (Table 9). Business rate relief was most favoured by affected firms, followed by interest relief and deferment of tax. A majority of the firms support each of these measures. There is weaker and less widespread support for other measures such as an extended credit facility, a business development grant, business advice and a financial loan. Even so, a small number of firms, particularly the larger ones, felt that these other measures would be beneficial to them. Across the spectrum of firms business advice is given low priority. This reflects wider scepticism concerning business support.

It is important to note there were significant differences of opinion between larger and small firms regarding the relevance and utility of particular aid schemes. Bigger microbusinesses are more interested in soft loans. Smaller firms are opposed to any deferment of payments (particularly loans).

Table 9: Aid schemes for rural businesses

Potential Aid	*Very helpful %*	*Moderately helpfu %l*	*Not much help %*
Business rate relief	50	20	14
Interest relief/deferment	39	26	20
Deferment of tax	37	23	26
Extended credit (e.g. overdraft)	17	34	33
Business development grant	19	29	36
Business advice	16	27	41
Financial loan	10	27	46

There were also sectoral contrasts in opinions on appropriate aid. Business rate relief, for example, is most favoured by hospitality, recreation and culture, transport and retailing firms. Many of the firms though, particularly within hospitality, are home based and pay domestic rates, so business rate relief would not benefit all. Land-based businesses are mainly not interested in business rate relief and instead emphasise interest relief/deferment. This measure also won support from other sectors.

8. RECOMMENDATIONS AND CONCLUSIONS

8.1 Recommendations

The government has already announced certain measures to ease the short-term crisis. The ones favoured by the affected firms are business rate relief, interest relief and deferment of tax. More needs to be done along these lines, including efforts to ensure that aid reaches the firms that need it. Other types of measure would assist particular groups of firms, including extended credit facility, a business development grant, business advice and a financial loan. More generally, aid should be provided to assist tourism promotion, to help firms and places recapture lost overseas and UK markets.

There will be medium and long-term consequences for firms and areas that have been badly hit (some of the former, indeed, will not survive). These need longer-term help and carefully thought-out area-based regeneration programmes designed to create more robust local economies.

8.2 Conclusions

There are wider lessons from the epidemic and the way it has been handled that public policy needs to embrace.

The Foot and Mouth epidemic has revealed starkly the continuing dependency of the countryside on farming and the resultant vulnerability of the diversified rural economy to an agricultural crisis. Preliminary economic analysis suggests that the impact of the epidemic on rural and regional economies could be as much as £10 billion, with £1 billion of this falling on agriculture, but £9 billion falling on the rest of the rural economy, including tourism and local services (Harvey 2001). Writing in the European edition of the Wall Street Journal, Matt Ridley predicted that: "This is probably the last time farming can get the British government to shut down the countryside for its own sake. Next time Foot and Mouth arrives the economic weight of farming will be too slight. Tourism will be too valuable to country dwellers" (quoted in the Guardian Editor, 23rd March 2001, p.5).

The crisis has also revealed the profound ambivalence in British society and politics towards the contemporary countryside and the lack of understanding of how much it has changed in recent decades. Significantly, both the major Committee of Inquiry and the economic analysis of the 1967 Foot and Mouth outbreak considered solely its impact on the agricultural sector (Northumberland Committee 1969; Power and Harris 1973). In those days the countryside was largely a farming domain. Much has changed since then, with the great growth in rural tourism and leisure, in counterurbanisation, in the urban-rural shift in certain types of employment and in the expansion of farm household pluriactivity. Yet public perceptions and official outlooks have not kept pace. For example, both the mass media and government have responded to the present crisis largely as if it were simply an agricultural matter (as though we were back in 1967). However, although farms have had to suffer the immediate brunt of the disease, most of the job losses and bankruptcies have been in the surrounding small businesses.

The Government's response has been led by MAFF and MAFF's approach to the crisis has been shaped by the conventional wisdom of veterinarians and traditional concerns over agricultural exports. The media has a stock response honed in previous food-related crises, and this, plus certain predominant news values (particularly, the strong visual images of sheep and cows being shot and pyres of bloated carcasses), have determined its treatment of the crisis as an animal plague visited on the country. That treatment, in turn, has set the terms of the political response to the crisis. Given the Government, political and media lead, it is no wonder that popular misperceptions run deep. Asked to avoid contact with farm animals, the public obediently stays away from market towns, village pubs, country hotels and visitor attractions too.

The consequence is a rural crisis, even though the media and MAFF have treated the Foot and Mouth outbreak as fundamentally an agricultural crisis. This predominant representation of the problem further exacerbates the actual rural crisis as alarmed tourists and visitors stay away in droves. The consequent effects reveal the fragilities of local rural economies. The peripheral rural areas where the disease has hit hardest - Cumbria, Northumberland and Durham, the far South West and Dumfries and Galloway - have narrow economic bases that are over dependent on primary industries and tourists and consistently rank as the most deprived rural areas in England (Countryside Agency 2001).

Once the crisis is over, therefore, the task will not simply be one of achieving recovery but constructing a new rural economy. At the same time, understandings of the wider role of agriculture will need to be revised. For example, what must be readily apparent now is that the public good benefits from pastoral farming in many parts of the UK, not least the in the North Pennines, the Lake District and Dartmoor, overshadow the market value of its tradable products. Yet farm commodity support systems under the CAP have not come to grips with this shift, with possibly tragic consequences for the array of businesses, communities, landscapes and habitats that depend upon agriculture's management of the countryside. The Foot and Mouth epidemic, its conduct and its impact thus raise profound questions about the relationship between agriculture and the rural economy, including how to secure sustainable agricultural livelihoods and how to promote more robust rural economies.

References

Barclay, C (2001) *Foot and Mouth Disease* Research Paper 01/35 27th March 2001 House of Commons.

Countryside Agency (2001) *The State of the Countryside 2001* Cheltenham:Countryside Agency.

Harvey, D. (2001) *What Lessons From Foot and Mouth? A Preliminary Economic Assessment of the 2001 Epidemic*, Centre for Rural Economy Working Paper Series No. 63, University of Newcastle upon Tyne.

Mendick, R. (2001) Disaster for tourism as losses far outstrip those of meat industry, *Independent on Sunday* 11 March, p.6.

Northumberland Committee (1969) *Report of the Committee of Inquiry on Foot-and-Mouth Disease1968* London: HMSO

Oswold, A. (2001) "Is rural Britain being laid to waste?" *The Times* 19 March 2001.

Power, A.P. and S.A.Harris (1973) A cost-benefit evaluation of alternative control policies for foot and mouth disease in Great Britain *Journal of Agricultural Economics*, 24, 573-96.

Raley, M. and Moxey, A. (2000) *Rural Microbusinesses in the North East of England: Final Survey Results* Centre for Rural Economy Research Report, University of Newcastle upon Tyne.

Whitby et al (1999) *The Rural Economy of North East England* Centre for Rural Economy Research Report, University of Newcastle upon Tyne.

ANNEX 1 SAMPLE CHARACTERISTICS

Tables 1 to 4 display the overarching characteristics of the sample of 180 firms. The sample contains a good geographical spread of businesses in terms of their sector, location, turnover and rurality. Of the 180 firms within the sample 52% were registered for VAT. The 180 firms employed 134 full time, 146 part time and 95 casual workers in 1999/2000 and there were 221 partners in the business.

Table 1: Sector

Sector	*Sampling frame*	*Interview sample*
Retail	312 (24%)	30 (17%)
Hospitality	279 (22%)	30 (17%)
Business activities	202 (16%)	20 (11%)
Manufacturing	140 (11%)	20 (11%)
Construction	103 (8%)	15 (8%)
Land based	62 (5%)	15 (8%)
Personal services	46 (4%)	10 (6%)
Transport	43 (3%)	10 (6%)
Health and social	41 (3%)	10 (6%)
Recreation and culture	33 (3%)	10 (6%)
Education and training	31 (2%)	10 (6%)
Total	1292	180

Table 2: Location

County	*Sampling frame*	*Interview sample (n=180)*
Durham	371 (28%)	42 (23%)
Northumberland	671 (52%)	101 (56%)
Tees Valley	252 (19%)	37 (20%)

Table 3: Turnover

Annual turnover	*Sampling frame*	*Interview sample (n=172)*
<£5,000	89 (7%)	11 (6%)
£5,000 to £9,999	72 (6%)	8 (4%)
£10,000 to £19,999	146 (12%)	19 (11%)
£20,000 to £50,999	302 (24%)	45 (25%)
£51,000 to £99,999	195 (16%)	28 (16%)
£100,000 to £249,999	269 (22%)	44 (24%)
>£250,000	165 (13%)	17 (9%)

Table 4: Urbanisation index scores of firms

Urbanisation index	*Sampling frame*	*Interview sample (n=180)*
0 to 4	120 (9%)	28 (16%)
4.1 to 10	276 (21%)	38 (21%)
10.1 to 30	826 (64%)	106 (59%)
30.1 to 40	72 (6%)	8 (4%)
Total	1294	180

ANNEX 2 THE INTERVIEW SCHEDULE

OPENING (GUIDE ONLY)

Hello could I speak to the owner or manager please. I'm based at the University of Newcastle carrying out a survey into the impacts of the Foot and Mouth Disease outbreak on rural businesses.

This is on behalf of a number of organisations in the region (e.g. the regional development agency- One North East, County Councils etc).

I wonder whether it would it be convenient for you to answer a few questions about this? It will take about 10 minutes.

Once get agreement: Can I also just point out that the interview is being tape recorded. This is to help us to analyse the results which will be totally anonymous.

A. To begin, can I confirm that you are a XXXXXX business
Kind of business: ....

B. And that you are based in XXXXXX?
Location of business: ....

ECONOMIC

First of all, can I ask you to try and think back a year …

1. How many FT, PT or casual people did you employ at the end of March 2000?
   Full time .... Part time .... Casual ....
2. How many FT, PT or casual people do you employ now?

   Full time .... Part time .... Casual ....
3. **If changed**: Has this change in number of employees been due to the FM outbreak? (if laid off staff, try to find out if family or non-family member, how long had been employed)

   ....
4. **If changed**: Do you see this as a permanent or temporary change in staff number?

   ....
5. Again try to think back a year and compare sales revenue for the months of March 2000 and March 2001. Could you say in percentage terms whether there has been an increase or decrease?

   ....

6. **If an increase or decrease**: In absolute terms could you estimate whether this represents an actual decrease/increase of between:

   £0 and £500
   £501 to £1000
   £1001 to £5000
   £5001 to £10000
   More than £10,000

7. **If an increase or decrease**: Approximately what percentage of this change, if any, would you say is due to the FM outbreak?

---

8. Has the business been affected in any other way by the FM outbreak, either positively or negatively?

9. **If effect on business** – how has this effect on the business come about? (e.g. less passing trade, restrictions on premises, restrictions on employees, can't access farms, farmers can't access them, cancellation of bookings, cancellation of orders, increased local custom given movement restrictions)

10. **If negative effect on business** – have you already tried or will you **soon** need to consider any of the following in the attempt to deal with the FM outbreak?

Temporarily closing the business	Tried	Soon consider	NO
Attempting to sell the business	Tried	Soon consider	NO
Reducing staff working hours	Tried	Soon consider	NO
Temporarily laying off staff	Tried	Soon consider	NO
Family members working longer hours	Tried	Soon consider	NO
Making staff redundant	Tried	Soon consider	NO
Taking out a loan	Tried	Soon consider	NO
Renegotiating loans or mortgage	Tried	Soon consider	NO
Cancelling/postponing investment in premises/stock/ Machinery	TriedSoon consider		NO
Cancelling/postponing plans to expand business	Tried	Soon consider	NO
Increasing marketing or advertising activity	Tried	Soon consider	NO
Other (please explain)			

---

11. Have any of your suppliers been affected by the FM outbreak? YES NO

    If yes, in what way?

    If yes, how has this affected you?

INSTITUTIONAL

12. **If any negative effect on business**: Have you gone to any of the following for help or advice about your business because of the FM outbreak?

Banks	YES	NO
Accountants/financial adviser	YES	NO
Family members	YES	NO
Friends	YES	NO
Federation of Small Businesses	YES	NO
Chamber of Commerce	YES	NO
Trade associations	YES	NO
Council/local authority	YES	NO
MP	YES	NO
Ministry of Agriculture, Fisheries and Food	YES	NO
Countryside Agency	YES	NO
Tourist board	YES	NO
Business Link Rural Business Helpline	YES	NO
Small Business Service	YES	NO
Tax Helpline	YES	NO
Rural stress information network	YES	NO
Samaritans	YES	NO
Other? Please specify?		

SOCIAL – I would just like to ask you some questions about the social impact of the FM outbreak:

13. Has the FM outbreak affected your daily life in any way?
    If yes, how?

14. Has the FM outbreak affected your family or household in any way?
    If yes, how?

15. Has the FM outbreak affected your community in any way?
    If yes, how?

FUTURE – I would just like to ask you some questions about the future:

16. The disease is likely to continue to impose restrictions on the movement of the public, farmers and livestock into the summer months. What effects would you expect on your business come July?

17. Do you expect any long term effects on your business from the FM outbreak?
    If yes, what?

AID SCHEMES

18. How do you think government could help rural businesses to cope with the FM outbreak?

19. **If FM has negatively affected this business**: What form of external assistance do you think would most help **you** through the FM crisis?

20. **If FM has negatively affected this business**: I have a checklist of forms of special assistance that could be provided. Could you say how helpful they would be to **your sort of business**? For each please say whether you think they would be: not much help, moderately helpful or very helpful.

Financial loan	Not much help	Mod Help	Very Help
Extended credit(eg overdraft)	Not much help	Mod Help	Very Help
Business development grant	Not much help	Mod Help	Very Help
Interest relief/deferment	Not much help	Mod Help	Very Help
Business rate relief	Not much help	Mod Help	Very Help
Deferment of Tax	Not much help	Mod Help	Very Help
Business advice	Not much help	Mod Help	Very Help

21. **For those stating that business advice would be helpful (i.e. 2 or 3):** What areas of business advice do you think would be helpful?

22. To help us to test whether the government has set its rates threshold appropriately in its package of measures to support rural businesses, could you possibly give us an indication of the rateable value of your business premises?

23. Do you have any other comments you wish to make in relation to the FM outbreak?

24. Finally, would you be willing to be interviewed again later in the year to help us monitor the ongoing impacts of the FM outbreak?

YES NO