RESEARCH PAPER 01/35
27 MARCH 2001

Foot and Mouth Disease

This paper provides briefing on the Foot and Mouth outbreak, with information about the disease, the origins of the outbreak and how it has spread. There is a discussion of the vaccination option, including the economic arguments for and against. The effects on tourism are also considered.

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ISSN 1368-8456

Summary of main points

- Foot and Mouth Disease is extremely infectious, although not normally fatal to animals;
- The UK outbreak almost certainly originated in pig swill that had not been boiled, as is the legal requirement, and that contained illegally imported, contaminated meat;
- The UK has favoured a slaughter policy rather than vaccination for more than a century;
- Vaccination is illegal within the EU, except in limited circumstances as part of a strategy to eliminate the disease;
- The economic case for slaughter may be justified, even if the outbreak is expensive, because there have been no serious outbreaks in the UK since 1967;
- The effects on tourism are expected to be large, but they remain uncertain;
- The Government has offered compensation to farmers and, to a lesser extent, to other rural businesses.

CONTENTS

I Introduction

This paper cannot be a comprehensive account of the current outbreak because the situation is changing so fast. Current information, updated daily, is available on the special MAFF website:

http://www.maff.gov.uk/animalh/diseases/fmd/

Another site providing additional detailed information on the outbreaks:

http://www.pighealth.com/fmd.htm

A Commons Library page that will be updated regularly is at:

http://hcl1.hclibrary.parliament.uk/sections/ses/Notes-HTML/crb/FootMouthDisease.htm

Many of the comments and estimates quoted in this paper are necessarily speculative because the situation is changing and it is too soon for a proper analysis. However, we might have to wait many months before a complete report on the outbreak is published.

II The Disease

Foot and Mouth Disease (FMD) is a highly contagious disease of cattle, pigs, sheep, goats and wild ruminants, characterised by fever, vesicles on the feet, mouth and udder and by death in young animals. FMD is caused by a virus of the genus *Aphthovirus* within the family of Picornaviridae.[1]

A. Symptoms of the disease

The symptoms in animals with FMD include the following:

Cattle
Vesicles (skin blisters) on the tongue, lips, dental pad, inner aspects of cheeks;
Vesicles on the feet;
Acute lameness, usually in more than one foot;
"Chomping" of jaws and grinding of teeth due to pain in the mouth;
There may be mortality in young animals due to myocarditis (inflammation of the heart muscle);
Morbidity (the condition of being diseased) is usually extremely high but mortality low;
There may be loss of performance with chronic lameness, permanent drop in milk yield and poor weight gain.

[1] R.P.Kitching and D.K.Mackay, *Foot-and-Mouth Disease*, MAFF

Pigs
Pigs are extremely lame, are reluctant to move and adopt a hunched gait if forced to move;
Vesicular lesions similar to those in cattle appear rapidly on the snout, mouth, feet and possibly the pressure points of the limbs;
Mortality in unweaned piglets can be up to 100%;
Lesions are frequently subject to secondary infection;
Loss of the hoof is a frequent sequel to acute infection.

Sheep
FMD often produces only a mild clinical disease in sheep and goats;
Sudden lameness may be seen in a large proportion of the flock;
If infection enters around the time of lambing, mortality in lambs can be very high due to myocarditis.[2]

The Office International Des Epizooties summed up the epidemiology of the disease:

- One of the most contagious animal diseases, with important economic losses;
- Low mortality rate in adult animals, but often high mortality in young due to myocarditis.[3]

B. How is the disease transmitted?

The disease may be transmitted by:

- Movement of infected animals (the most usual method)

  Animals may be infective without necessarily showing clinical signs of disease: during the incubation period; if they are only sub-clinically infected because of low susceptibility or partial immunity; or if they are carrier animals.

  Carriers are ruminants (cattle, sheep or goats) in which the virus persists in the pharynx for varying amounts of time after initial infection.

- Contact with contaminated animal products

  Infected animals shed virus in large amounts in: all excretions; vesicular fluid; exhaled breath; milk; meat. Meat from viraemic animals is potentially contaminated but the virus is normally made harmless by the fall in pH due to *rigor mortis*.

- Contact with contaminated personnel

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2 MAFF, *Foot and Mouth Disease leaflet*, 1994
3 http://www.oie.int/eng/maladies/fiches/A_A010.htm

- Contact with contaminated equipment

- Windborne spread

  This can occur under suitable atmospheric conditions, especially in humid cool conditions with low winds in a constant direction. It usually occurs over short distances of up to 10km, but long distance transmission of over 200km can occur. Pigs are the usual source of airborne virus, with each one producing up to 400 million infectious doses per day. This is some 3000 times more than the amount excreted by cattle or sheep by the airborne route.[4]

III The 2001 outbreak

A. Origins

Professor Mac Johnston, supported by other vets, says that the disease can almost certainly be traced back to pig swill:

> Foot-and-mouth can be harboured in the lymph nodes of an animal, which are trimmed from imported carcasses after arrival and can end up in pig swill, said the professor. He added: "The virus will not survive in meat for more than two weeks if healthy. But it can live in the lymph nodes, which filter toxins from the bloodstream, for four months." Recent problems in the domestic meat industry – such as BSE and an outbreak of swine fever last year – had made imports more economically attractive, he said…
>
> Professor Philip Duffus…said the "virulent" virus in Britain was similar to one which affected South Africa recently and was the same type 'O' strain as that which caused an outbreak in Japan.[5]

Only a very small proportion of British pigs are fed on pig swill, although the practice is allowed:

> **Mr. Oaten:** To ask the Minister of Agriculture, Fisheries and Food what estimate he has made of the number of pigs fed with swill.
>
> **Ms Quin** *[holding answer 9 March 2001]:* We estimate that, last year, around 82,000 pigs in Great Britain were fed on swill, around 1.4 per cent. of the total GB pig population.[6]

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4 MAFF, *Foot and Mouth Disease Leaflet*, 1994, pp 2-3
5 "Infected swill 'was likely cause'", *BBC News Online*, 13 March 2001
6 HC Deb 14 March 2001 c 639W

Pig swill has to be heat treated. In addition, since 1999, all businesses in Britain that process, transport or feed swill must be licensed and their premises regularly inspected by vets. A complete ban on the use of swill is likely, at either UK or EU level:

> At a meeting of the European Commission's Standing Veterinary Committee last month [February 2001], several member states asked the Commission to consider a European Union-wide ban on swill feeding. The feed industry in Britain wants a ban too. "It taints the whole industry and we're fed up with it," says a spokeswoman for the UK Agricultural Supply Trade Association.[7]

Even if the pig swill was not treated, that does not explain how the infected meat came into the country in the first place. One theory is that infected meat might have come from a leftover aircraft meal, but established controls should prevent this:

> **Miss McIntosh:** To ask the Minister of Agriculture, Fisheries and Food what penalties apply for the collection from ships and aircraft of swill derived from outside the UK.
>
> **Ms Quin:** Controls on catering waste from aircraft and ships landed in the UK require that it be collected and sent for disposal in secure transport under the authorisation and approval of local Divisional Veterinary Officers. The material may not be used for swill feeding to pigs. Failure to observe these conditions may result in prosecution.[8]

Another theory is that military meat was involved:

> This theory centres on the fact that the Ministry of Defence in Northumberland regularly imports cheap meat from countries around the world, evading normal customs practices. It is said some of the meat, which may have carried the virus, was sold as pigswill to the farm at the centre of the outbreak.
>
> Fact: This, or a version of it might be true, and is under investigation. Certainly the main theory that MAFF is working on is that infected meat found its way into pigswill that was not cooked properly and then caused the outbreak.[9]

The following PQ explains the checks that are undertaken on imported meat:

> **Miss McIntosh:** To ask the Minister of Agriculture, Fisheries and Food what inspections are carried out, and by whom, on meat imports from *(a)* EU countries and *(b)* other countries.

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7 "Kill the Swill", *New Scientist*, 17 March 2001
8 HC Deb 14 March 2001 c 639W
9 "Rural myths catch military connection in their net", *Guardian*, 22 March 2001

Ms Quin: Community legislation requires member states to comply with strict hygiene rules in the production of meat and meat products in the Community before they are approved to trade. Among other things, this sets out the licensing, structural and veterinary supervision requirements to be applied in all meat plants before they can export.

The European Commission is responsible for ensuring member states fulfil their obligations. EU legislation also provides for member states to carry out checks at points of destination. These are carried out by Meat Hygiene Service official veterinary surgeons at licensed premises, local authorities and the State Veterinary Service in the UK. Depending on the perceived health risk, checks at destination may be random or 100 per cent. Following the recent identification of specified risk material in imports of meat from Germany and the current foot and mouth disease problems in the UK, the Meat Hygiene Service has been instructed to step up levels of inspection at cutting plants and cold stores to ensure that increased volumes of imports can be checked for the necessary health marks and correct documentation.

All meat imported from third countries into the UK must enter at designated UK border inspection posts (BIPs) where it is subject to veterinary checking. All consignments are subject to documentary and identity checks in accordance with EU legislation. These checks are to ensure that conditions of import into the Community have been complied with and that the products have remained in a satisfactory condition during transport. They are carried out by official veterinary surgeons employed by the local authority in which the BIP is located.

Mrs. Ann Winterton: To ask the Minister of Agriculture, Fisheries and Food what his policy is on banning the importation of beef, pigmeat and sheepmeat from countries suffering from outbreaks of *(a)* foot and mouth disease and *(b)* swine fever.

Ms Quin: The importation into the European Community of fresh meat from third countries is governed by Community legislation.

When outbreaks of notifiable disease occur (including both classical swine fever and foot and mouth disease) the Products of Animal Origin (Import and Export) Regulations 1996 allow the Government to prohibit the import of meat from a country or part thereof. On notification of an outbreak these Regulations allow the UK to issue a Declaration prohibiting meat from the relevant country or part thereof. They are effective from the date and time of signature and are sent immediately to all enforcement authorities. These Declarations remain in force pending the adoption of appropriate Community legislation. These provisions apply equally to outbreaks in member states and in third countries.[10]

[10] HC Deb 12 March 2001 cc 479-480W

B. Continuation of the outbreak

Some people have suggested that EU law has resulted in the closing of small slaughterhouses in the UK, so that animals have to be transported for longer distances, with increased risks of spreading disease throughout the country.

There was no direct EU policy to close the small slaughterhouses, but many have closed in recent years, and the imposition of EU hygiene controls has been widely blamed. Before 1992, slaughterhouses were regulated by local authorities and conformed to British law. EU law was only applied to those slaughterhouses that produced meat for export. With the coming of the Single Internal Market, EU law was amended, placing the same requirements on all slaughterhouses.[11] This law was implemented by the *Fresh Meat (Hygiene and Inspection) Regulations 1992*.

In 1995, the Meat Hygiene Service, an executive agency of MAFF, was formed to implement that policy and also to tighten up on the enforcement of legislation relating to BSE, over which there were considerable concerns. Some slaughterhouses had their licences withdrawn at this stage because they could not comply with the hygiene requirements, even though they were given extra time to do so. All the evidence about the failure of enforcement of BSE measures, along with a report undertaken by the Meat Hygiene Service a few months after taking over, suggests that hygiene standards were unsatisfactory under the pre-1995 system.

The result has been a considerable reduction in the number of slaughterhouses. At the end of 1995 there were 402 abattoirs licensed under the *Fresh Meat (Hygiene and Inspection) Regulations 1995*, along with 36 in Wales and 48 in Scotland.[12] Figures in January 2001 show England having 186 full throughput and 130 low throughput slaughterhouses. Scotland had 36 full throughput and 8 low throughput slaughterhouses. Wales had 15 full throughput and 20 low throughput slaughterhouses.[13] Low throughput slaughterhouses slaughter no more than 600 livestock units each year, at a rate not exceeding 12 units per week. They only need to conform to less strict regulations relating to the building, although equally strict rules on hygiene.

It is not necessarily correct to blame the changes on EU law. Closures and consolidation are normal in industry, so that some could have been expected in any case. The imposition of stricter hygiene requirements was almost bound to result in the closure of some enterprises that were unwilling to undertake major structural changes. The EC Directive specifically allowed low throughput slaughterhouses to operate under a less strict regime than full throughput slaughterhouses, without compromising hygiene.

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[11] Directive 91/497/EEC amending and consolidating Dir 64,433 on health problems affecting intra Community trade in fresh meat etc, EEC 24.09.1991, OJ L 268

[12] HC Deb 29 February 1996 cc 688-9W

[13] Meat Hygiene Service, *Meat Hygiene Enforcement Report January 2001*, p 2

One major complaint from owners of abattoirs has related to the requirement that all slaughterhouses have veterinary supervision. Traditionally meat inspectors employed by the local authority did the job, and their supporters claim that they were better at spotting diseases in meat, although less skilled in understanding live animals. The EU system requires a veterinary surgeon in charge, although a meat inspector would be allowed to perform the post mortem inspection. The requirement of 100% veterinary supervision for all full throughput slaughterhouses derives from the 1991 EC Fresh Meat Directive.[14] Since then there have been various derogations, but the UK has failed to comply with the requirement of 100% veterinary supervision. The UK has agreed with the European Commission that it will comply by 1 April 2001.

On the other hand, the FMD outbreak was first spotted by a veterinary surgeon at Cheale Meats abattoir near Brentwood in Essex on 19 February 2001. He had the knowledge to recognise the disease and the confidence to act immediately to halt all operations at the abattoir.[15]

Small slaughterhouses have complained that they have to pay charges that are too high, partly because they would like to pay a vet on a headage basis, rather than an hourly rate. A report (The Maclean Report) from a task force commissioned by the Food Standards Agency, published in June 2000, supported that view:

> 1. The Task Force considers that in view of what it sees as the serious threat to small and medium-sized abattoirs and cutting plants, the Government should contribute to the costs of meat inspection in Great Britain. The Task Force believes that the Government should therefore change its policy of requiring the Meat Hygiene Service to recover as much as possible of its hygiene inspection costs from the meat industry (since this is not required by EU rules on charging). It recommends that the current method of charging for meat inspections on an hourly basis should be changed and that, instead, all abattoirs and cutting plants should be charged the standard (headage) fees laid down in the EU Charges Directive (85/73/EEC, as amended) or their actual inspection costs where these are lower. The Task Force estimates that the cost to Government of adopting this recommendation could be up to £19m a year once veterinary supervision levels are brought into line with EU requirements.[16]

The Government has accepted the Maclean Report, which is to be implemented by a Statutory Instrument in March 2001. Agreement has been reached between the Food Standards Agency and the industry over an arbitration system for disagreements between

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[14] Directive 64/433/EEC, as amended.

[15] D.Harrison, "11.36 am call that started the crisis", *Sunday Telegraph*, 25 February 2001

[16] Food Standards Agency News Release, *Task Force Recommends Changes to Meat Inspection Charges. Agency Publishes Task Force Report Today*, 26 June 2000

abattoir owners and MAFF.[17] The Countryside White Paper, in November 2000, announced new, additional aid (worth £8.7m in 2001-02) in respect of meat inspection costs to help secure the future of small and medium-sized abattoirs.[18]

It is too soon to know how far to blame the reduction in abattoirs for the quick spread of FMD. The movement of animals for long distances is a very old practice, and it looks at this stage as if much of the early spread has derived more from the sale and rapid resale of sheep in different markets. It is unclear whether this was linked to unrecorded transfers undertaken to boost subsidies.[19]

Early predictions that the outbreak would be contained were based on hopes that tracing animals that had come into contact with infected animals and the imposition of a ban on animal movements would prevent or strictly limit secondary infections. At the time of writing, that expectation seems misplaced, particularly in Cumbria where there have been several new cases every day. Professor Roy Anderson, an epidemiologist advising MAFF on the course of the outbreak, has said that the outbreak will not peak until early May:

> Professor Roy Anderson added that if the number of cases continued to increase at an average of two every hour, the epidemic would continue for months – possibly until August…[He] told BBC Two's Newsnight programme this was likely to be the worst epidemic of the disease the country had seen…After presenting his findings to MAFF on Wednesday night, Mr Anderson said the infection was running wild in the UK. "I think everybody is in agreement, both the government, the farming community and the independent scientific advice, that this epidemic is not under control at the current point of time".[20]

A MAFF News Release on 23 March, based on the preliminary views of independent epidemiologists, contains more pessimistic forecasts than the earlier ones:

> The outlook for FMD in Great Britain 2001 is for a very large epidemic. It will grow fast in the next few weeks and continue for many months. The number of cases will rise steeply with rapid expansion in the existing areas in spite of current controls. Estimates vary from 70 cases a day over the next two weeks to over 4000 cases by June 2001…The experts said that the last major epidemic in UK 1967/8 was quite different. In 2001 more of the country is affected, sheep are an important reservoir of infection, the scale of dissemination by animal movement was enormous early on. In addition the size of flocks and herds means the scale of operations is very big.[21]

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[17] Food Standards Agency Press Notice 2001/0092, *Changes to Proposed Meat Inspection Charging System*, 5 March 2001
[18] DETR/MAFF, *Our Countryside: The Future*, November 2000, Cm 4909 p 92
[19] "Ministers hit out at Farmers", *Sunday Times*, 25 March 2001
[20] "Farm Disease 'to peak in May'", *BBCNews Online*, 22 March 2001
[21] MAFF News Release 112/01, *Foot and Mouth Disease: Epidemiological Forecasts*, 23 March 2001

IV Is Vaccination an alternative to slaughter?

A. British and EU policy on vaccination

There are seven immunologically distinct serotypes of FMD virus, although only one in this outbreak. Immunity to FMD following vaccination is shortlived and animals recovered from infection with one serotype remain susceptible to infection with any of the other six serotypes.[22] Vaccination, therefore, is not necessarily the answer to the disease. In fact, policy has moved over the years against vaccination, in favour of a slaughter policy.

In the UK, emergency vaccination had been considered during the 1967 outbreak. However, the plan was not carried out because it became apparent that the outbreak was waning.[23]

The vaccination option was considered in the UK after 1967, either as overall prophylactic vaccination or as ring vaccination around an outbreak to prevent it spreading. However, prophylactic vaccination was rejected partly on the grounds of cost and partly because of loss of export markets, since importers feared that animals without symptoms might carry the disease. Ring vaccination was also rejected, largely on practical grounds, including that of bringing in all the animals in from a large area. That might involve bringing in sheep from the hills where they had been free from infection to farmyards where the infection might actually spread before the vaccination programme worked.

Conventional vaccines consist of inactivated viruses. This makes it difficult to tell a vaccinated animal from one harbouring live virus. Researchers in the USA are developing a vaccine that will make the job easier:

> They have inserted the genes that code for the foot and mouth viral coat into live human adenoviruses. When animals get this injection, infected cells produce the foot and mouth viral coat and trigger an immune response. But the adenoviruses can't replicate…Crucially, the adenovirus contains the genes for only a few of the foot and mouth proteins. So testing blood for antibodies to the missing viral proteins can easily distinguish between vaccinated and infected animals.[24]

Vaccination was practised in various Continental countries. In 1969, when the report on the 1967 outbreak was written, France, Belgium, Germany, Italy, the Netherlands and

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[22] RP Kitching and DK Mackay, *Foot-and-Mouth Disease*, MAFF

[23] MAFF, *Report of the Committee of Inquiry on Foot-And-Mouth Disease 1968 Part One*, April 1969, Cmnd 3999 paragraph 136

[24] "Why the slaughter?", *New Scientist*, 3 March 2001, p 5

Switzerland all practised general vaccination in their control programmes.[25] A paper circulated by MAFF in 2001 explains how European policy has developed:

> Control of FMD within the European Community is by "stamping out", i.e the slaughter of all affected animals, together with the imposition of strict animal movement controls and surveillance. Although Europe, both East and West, phased out prophylactic vaccination during 1990-91, the option to apply emergency vaccine has been retained, and banks of concentrated antigen for vaccine production are being established at Pirbright (UK), Lyons, Brescia and Cologne. Experience has shown that it is not possible to control FMD by vaccination alone, and that control of animal movement is essential. An additional problem with vaccination is that vaccinated animals exposed to infection may then become carriers without showing clinical signs. Such animals create a risk of further outbreaks.[26]

In a reply to a PQ in 1993, John Gummer referred to "the long-standing policy not to permit the presence in the United Kingdom of animals which have been vaccinated against FMD".[27] That policy was not a result of EU legislation. In 1989 the UK was in a minority in the EU in not allowing FMD vaccination, as the following PQ from April 1989 shows:

> **Mr. Ron Davies:** To ask the Minister of Agriculture, Fisheries and Food if he will identify those European Community countries that vaccinate against foot and mouth disease in cattle.
>
> **Mr. MacGregor:** Cattle are vaccinated against foot and mouth disease in all European Community countries except Denmark, the Republic of Ireland and the United Kingdom.
>
> **Mr. Ron Davies:** To ask the Minister of Agriculture, Fisheries and Food if he has any plans to stop the testing for foot and mouth disease by British veterinary staff of imported livestock ; and if he will make a statement.
>
> **Mr. MacGregor:** No tests for foot and mouth disease are carried out on imported livestock. Livestock susceptible to the disease, from countries which have had outbreaks within the last two years or where vaccination is practised, are required to be tested with negative results before export and also to undergo 21 days supervised post-import quarantine. There are no plans to remove these requirements from our import controls.[28]

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[25] MAFF, *Report of the Committee of Inquiry on Foot-And-Mouth Disease 1968 Part One*, April 1969, Cmnd 3999, paragraph 108

[26] RP Kitching and DK Mackay, *Foot-And-Mouth Disease*, MAFF

[27] HC Deb 27 April 1993 c 379W

[28] HC Deb 11 April 1989 c 439

Council Directive 85/511/EEC Article 1 explicitly allowed the use of vaccination against FMD in Member States.[29] However, in 1990 it was amended by Council Directive 90/423/EEC.[30] Article 13 (1) of the 1990 Directive stated that "the use of foot and mouth vaccines is prohibited". However, 13 (3) provided that if Foot-and-Mouth disease had been confirmed and threatened to become extensive, emergency vaccination might be introduced.

B. Supporters of vaccination

a. The argument that the UK hostility to vaccination rests on prejudice

An article by a veterinary surgeon researching the history of FMD argues that vaccination should have a place in FMD control. She notes that the slaughter policy was introduced for economic reasons, and that the justification might disappear if economic factors changed. At the moment, however, she considers those arguments stronger than ever, because of globalisation. Nevertheless, she argues that vaccination should have a role in FMD control:

> While vaccination does present technical and administrative difficulties, these could be effectively tackled were the ministry to desire it. Instead, technical and practical problems are presented as almost insurmountable. It is important to realise that MAFF has never wanted to vaccinate and that the problems it cites merely justify an existing stance rather than providing its basic rationale. No vaccine will ever achieve the standards MAFF desires, and the reasons for this lie in the arena of national pride, historic tradition and government credibility to the public. MAFF hides deeper anti-vaccination sentiments behind scientific reasoning, and this deserves to be recognised. If the economic reasons for slaughter or its practical feasibility are thrown into question then vaccination is the only real alternative. The grounds cited by MAFF are insufficient for the rejection of vaccination and exposing the real reasoning behind the decision is necessary in order for any substantial challenge to be mounted against this decision. [31]

Peter Kindersley (of Dorling Kindersley) is backing a judicial review of the slaughter policy in the High Court by Cumbrian farmers. A technical challenge is also being mounted by Mr Kindersley through the Berkshire-based Elm Farm Research Centre.[32]

One problem with FMD is that the UK is part of the international economy, which imposes bans on the exports of animals and animal products from countries with FMD. If the UK lost its disease-free status, and consequently many major export markets, that

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29 OJ L315, 26 November 1985
30 OJ L224, 18 August 1990
31 Abigail Woods, "An Evaluation of the Current Policy from a Historical Perspective", March 2001, circulated
32 "Legal challenge to slaughter", *BBCNews Online*, 20 March 2001

would impose considerable costs. Whether the whole world could have learned to live with FMD is a very different question from what would happen to a single country failing to eradicate the disease.

b. The use of vaccination in Taiwan

It is sometimes suggested that Taiwan adopted vaccination during an outbreak of FMD in 1997 after the slaughter policy failed. That is not quite correct, and the situation was very different from that facing the UK.

In Taiwan, pork is traditionally the leading meat produced and consumed, and in 1996 Taiwan had the world's highest ratio of pigs (hogs) to land outside the Netherlands. In March 1997 Foot and Mouth disease (FMD) broke out and quickly spread to 1,300 farms within 10 days.

> Taiwanese authorities, along with the island's hog industry, faced a dilemma. Farmers and meat processors wanted to kill all the hogs and start over. But for several reasons, the Council of Agriculture (COA), Taiwan's equivalent of USDA (or MAFF), recommended controlling the disease by vaccinating healthy hogs at disease-free farms. First, with about 100,000 people raising hogs and 700,000 in related businesses, and with 11 million hogs in stock before the outbreak, destroying the entire hog population would seriously impact the island economically, socially and politically, and carry a substantial environmental cost of disposal. Second, given that the last recorded FMD outbreak had occurred in 1918, it seemed highly possible that the disease had come from abroad. If that were true, destroying the domestic hog population might not prevent a reinfection. Taiwan's legislature adopted the COA recommendation to exterminate all hogs on contaminated farms and inoculate uninfected animals…
>
> Between March 20 and July 16, 1997 FMD had cost Taiwan more than 4 million of the island's nearly 11 million hogs. Of these, 185,000 died from the disease, and 3.85 million on infected farms had to be destroyed.[33]

Since late March 1997, it has been compulsory for each of Taiwan' hogs to be vaccinated twice in its life for FMD. As the vaccinations began to take effect, the FMD outbreak slowed. In less than three months, it was basically under control. Only a handful of new cases were reported after early June 1997.[34]

There have been further limited outbreaks of FMD since then. Pigs were infected in December 1997 and a few cases were found in April 1998. In June 1999 and again in July 1999 and January 2000, FMD was found in cattle. Since 10 January 2000 the Government has vaccinated all cloven-hoofed animals. Since then, only two outbreaks of FMD have occurred. The recent outbreaks have been believed to be linked to the

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[33] "Taiwan's Economy Transformed", *AgJournal*, 25 September 2000

[34] ibid

smuggling of livestock and livestock products from mainland China. However, Taiwan remains listed as an infected area for FMD. Another problem is the presence of small farms whose pigs are not sold at market and where the law on vaccination is evaded.

c. EU Policy and the proposal to use vaccination in Holland

Holland has had 3 outbreaks in 2001, and has proposed the use of vaccination. Other European Union Member States have an interest in what each country does, and the EU Standing Veterinary Committee met on 23 March 2001 to discuss the position. The Committee confirmed strong commitment to the slaughter polity combined with strict animal movement controls in order to eradicate FMD. It laid down strict conditions under which vaccination would be acceptable, and showed the limited role that vaccination might play in the eradication of FMD:

> Member States discussed also how the current Community provisions which allow for “suppressive vaccination” might operate. These provisions provide for vaccination of a limited number of animals in a restricted area surrounding an outbreak of FMD if the volume of animals exceeds the available destruction capacity. This very specific emergency vaccination could be used to contain the disease around a confirmed outbreak. Animals awaiting slaughtering and destruction could be vaccinated to avoid that they further spread the virus. Since a reduction of infectivity only begins from 6-10 days after vaccination this policy would only be useful if the animals concerned could not be culled within this timeframe.
> In this context and on the request of the Dutch delegation, the Standing Veterinary Committee gave a favourable opinion to a proposal of the European Commission that the Netherlands may resort, under certain well-defined conditions, to an emergency vaccination against foot and mouth disease. This “suppressive” vaccination can only be carried out on animals in identified holdings situated in a defined area and it can only be carried out exclusively in conjunction with immediate and quick destruction of the animals. The Netherlands could resort to this option if – in the case of further outbreaks – a shortage of rendering capacities might arise.
>
> However, the Netherlands declared today in the Standing Veterinary Committee that they will not use this provision for the 3 outbreaks and 4 suspect cases recorded on 23 March. They also confirmed that they will kill and eventually destroy all eventually vaccinated animals without undue delay and in any case within two months.[35]

[35] European Commission Press Release, *FMD: General commitment not to re-introduce vaccination by Member States*, 23 March 2001

d. The argument that the UK slaughter policy would not work

A paper from Elm Farm Research Centre argued that the slaughter policy currently adopted in the UK will not work, for several reasons:

- The infection is simply too infectious under British conditions in high density stock raising areas for control by slaughter policy, especially where the authorities have proven unable to match the short recognition to slaughter interval used in the 1967/68 outbreak;
- The authorities have mistakenly used the stated incubation period in the OIE Animal Health Code of 14 days;
- The current delayed slaughter response favours new infections, and unrecognised animals with FMD could therefore be expected to result in between 5 and 50 new infections within 7 days.
- The epidemiology of FMD involving sheep is far too uncertain to have confidence that a mass cull within 3 km would be effective, or scientifically justified.
- The UK mass cull, therefore, unless it had occurred much earlier and involved all cattle and pigs in the restricted zones would be nowhere near sufficient to prevent infection in cattle and sheep beyond the 3 km radius.[36]

The paper argues for an emergency vaccination strategy, with stamping out of infected cases, citing the following advantages:

- Emergency vaccination is of proven use in FMD control…to create an immune barrier …or to dampen down infection within known FMD infected areas where there is a recognised need to reduce virus transmission and to prevent onward spread beyond the restricted area.
- Rapid reduction in virus circulation and new cases;
- It is capable of enormously reducing the risk of airborne and vehicular spread to unaffected areas;
- Vaccination is also seen as ethically and publicly acceptable;
- The activities can be undertaken by personnel who are not in short supply (as are veterinarians at present).[37]

C. Economic arguments for and against the slaughter policy

Professor David Harvey of the University of Newcastle, has argued in favour of the soundness of the economic argument for the slaughter policy.[38] He starts with the cost of a policy of simply letting the disease run its course. First, there is an animal welfare cost.

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[36] "The case for a change of policy to utilise vaccination in the strategy to control foot and mouth disease", *Elm Farm Research Centre*, March 2001

[37] ibid

[38] David R. Harvey, "What lessons from Foot and Mouth? A preliminary assessment of the 2001 epidemic," *University of Newcastle*, March 2001

Second, doing nothing would increase the costs of animal production, and thus of the foods that we get from them. He puts the cost of lower food production and increased animal management at £700 million a year. Third, livestock exports from the UK would no longer be accepted in many industrial countries. His estimate of that cost comes to £0.5 billion a year, giving a total loss of £1.3 bn, apart from the animal welfare costs.

He then looks at the cost of the present outbreak, with the slaughter policy, noting the costs to the tourist industry and accepting that it might reach £10 billion. That, however, substantially over estimates the real cost to the economy as a whole, because money not spent in the countryside will be spent elsewhere.

> With no control at all, the disease would cost at least £1bn per year. So, the simple answer is that the country as a whole could afford a £10bn epidemic once every ten years and still come out ahead in purely monetary terms. In fact, there are already unidentified winners of some, if not most, of this £10 billion somewhere else in the economy.

He then considered whether we should adopt a vaccination policy, but that is no automatic solution, not least because wild deer could not be vaccinated and because vaccinated animals can be carriers of the disease:

> But if we did, we would have to live with the consequences – we would never be free of the disease, which would become endemic throughout the country, with substantial reservoirs built up amongst wild deer and being carried by wildlife. The disease would inevitably erupt from time to time as the vaccines break down. Each time there was an eruption, we would have to kill the newly infected stock as we developed the new vaccine to cope, and re-vaccinate adjacent flocks and herds to contain the new outbreak. The last time this option was examined seriously (after the 1967 epidemic), it was estimated that we should expect to see some 16 outbreaks a year under such an option.

He points out that that would mean some 540 cases in the 30 odd years since 1967. He also noted the cost of vaccination. Based on the costs estimated after 1967, the total capitalised cost of a vaccination programme run for the 34 years since then would be about £5 billion in today's money.

Professor Harvey concludes that the economic case for the slaughter method of control is valid, but notes that it depends on three assumptions:

- There being infrequent epidemics (less than one every ten years);
- Each epidemic costing no more than £10 billion in total loss;
- The rest of the world continuing to believe that vaccination is not a sufficient control of the disease to prevent its transmission through international trade in livestock and livestock products.

An organic farmer, Mark Houghton Brown, has challenged the economic and animal welfare cases against vaccination and in favour of the slaughter policy:

> The economics of slaughter do not seem to have been recalculated for decades. Farmers and rural areas now rely on tourism and rural recreation for the bulk of their income. The £12 billion a year earned by tourism dwarfs agricultural sums. Rural tourism losses are running at £100 million per week – one month's losses are equivalent of all Britain's meat exports for a year. The direct cost of the cull and lost sales are now estimated at £3 billion. All this to save a despised and cruel live-export market worth £42 million a year at most. The cull, indefensible and sickening, will benefit only a few traders – and the large multiple retailers. The cost of the vaccine is around 10p a dose and two doses a year are likely to be necessary until the threat has dissipated. Even if it were possible to control the disease swiftly by slaughter alone, it is not remotely worth doing it like this. So much for the economic justification for the slaughter.
>
> The animal welfare considerations are equally flimsy. Adult sheep show such slight symptoms that tens of thousands now harbour the disease without showing ill-effects. Cattle and pigs undoubtedly suffer to some extent, and descriptions usually compare the discomfort caused by the virus to a serious bout of the flu.
>
> This disgusting holocaust is not worthy of 21st-century society. The international trade it is supposed to protect is wholly to the disadvantage of UK agriculture anyway, as all the while the contaminated pig meat we are supposedly not allowed to sell gets imported back here at less than our cost of production…[39]

A working paper by Professor Midmore, also issued by Elm Farm Research Centre, argues against the economics of the extended cull policy.[40] He starts from the value of livestock exports, concluding that £310 million "probably represents a reasonable order of magnitude estimate of the overall value of threatened exports". He then points out that not all of the export revenues accruing to farmers would be lost, as the output would have some value on the domestic market. That leads him to put a ceiling on potential loss of £300 million. He then argues that the cost of vaccination might be £25-50 million, some of which might be borne by the EU agriculture budget. Thus, in total, the maximum cost of the vaccination alternative would be limited to £350 million.

He then estimates the number of animals to be culled in the extended cull programme, in Cumbria, Dumfries & Galloway, Durham and Tyne & Wear, arriving at 15,900 pigs and 1,617,000 sheep. He then estimates the economic effect on the food supply chain and the aggregate economy at £72 million. However, the major losses come in tourism. He estimates the losses to tourism in Cumbria and Northumberland for the season at a conservative £280 million. He admits that a vaccination programme would come too late to prevent the loss of the Easter trade, but it might mitigate the losses for the summer season. Neglecting the impact on Dumfries & Galloway entirely, "the overall impact on tourism can be conservatively estimated at £330 million".

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[39] Mark Houghton Brown, "Inoculate – don't prevaricate", *Times*, 17 March 2001

[40] Peter Midmore, "The 2001 Foot and Mouth Outbreak: Economic Arguments against an Extended Cull", *Elm Farm Research Centre Working Paper*, March 2001

His conclusion is that costs exceed the benefits of the extended cull by £54 million.

These estimates, of course, relate to slightly different items. Professor Harvey's contribution is to take a 30 year view, which tends to show the slaughter policy as being justified, even if it is more expensive in the year it is undertaken than the vaccination or "do-nothing" policies. Also, Mark Houghton Brown seems to assume that the UK would be allowed to export meat, even if FMD became endemic here. That is unlikely, not least because imported meat from an FMD country is believed to be the cause of the UK outbreak. His £42 million figure for loss of export trade is therefore implausibly low.

It would help if we knew the costs, at least to the food chain, of the present outbreak, but it is far too soon to estimate them, since the scale and duration are as yet unknown. The National Farmers Union website presents a simple figure:

> It is estimated that the food supply chain - ie the agricultural industry, abattoirs and hauliers - is currently losing £250 million per month.[41]

The full calculation is much more complex. Early in the outbreak, a well-known agricultural economist expressed scepticism about some extreme possibilities:

> The current crisis can be placed in perspective by comparing the numbers of animals likely to be destroyed with the numbers typically slaughtered. In a typical week the UK agricultural industry sends 600,000 cattle, sheep and pigs for slaughter. The last big outbreak of foot-and-mouth disease, in 1967, lasted six weeks, during which 400,000 cattle were destroyed.[42] Even if it turns out that the number destroyed in the present outbreak were double that of 1967, the loss would amount to only about 4% of the total likely to be slaughtered this year…Consider first the dairy sector: this is vulnerable to foot-and-mouth disease but the sale of milk continues as usual for farms that remain free of disease. What of beef and sheep? Only a small proportion of the UK's population of cattle and sheep would have been traded in the weeks during which the ban on animal movements is in force. For this proportion there will be a cash flow loss as farmers are prevented from marketing their animals. But after the outbreak has been eradicated these animals will go to market…What of the pig sector? Here timing is more critical and delay in taking pigs to market does result in a depreciating value and also welfare concerns for the pigs…The longer-lasting impact of this foot-and-mouth epidemic is the damage it may do to exports of food products.[43]

Estimates of the cost to the tourist industry are presented in the next section.

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41 NFU Website, http://www.nfu.org.uk/info/fmdqorg.asp

42 It is unclear how the six weeks figure is derived. The 1967 outbreak started in late October 1967 and large numbers of cases continued till the end of December. Some cases continued to arise until June 1968

43 Séan Rickard, "A crisis, not a disaster", *Financial Times*, 1 March 2001

V Tourism[44]

The current outbreak of Foot and Mouth disease is now having an impact on parts of the rural economy other than just agriculture. Indeed in terms of the outbreak's impact on the whole economy the effect on the tourism sector may be more significant, at least in the short term, than the problems in agriculture itself. This section brings together recent reports on how these effects are being felt in rural areas, and some of the remedies that are being proposed.

A. Background facts and figures on tourism[45]

- Total tourism expenditure in the UK in 1999 was estimated at around £64 billion (Final figures for 2000 are not yet available).
- Overseas visitors spent £12.76 billion in 2000, an increase of 2% on the amount they spent in 1999.
- There are an estimated 1.85 million jobs in UK tourism. In contrast, agriculture employs 429,000.[46]
- Britons spend over £30 billion on tourism day visits each year.
- The English Tourism Council (ETC) estimates that total spending by visitors to the English countryside amounts to £12 billion, supporting around 380,000 jobs.[47] This breaks down into spending in England of about £250 million per week in March, rising to £375 million per week in April and as much as £500 million per week in July.[48]

B. Measuring the impact on tourism

At the present time it is difficult to assess exactly what the extent of damage to the UK tourism industry will be. Estimates of the effects on tourism vary considerably. This section draws together some of them published in the last few weeks by the tourist industry itself, academics and in the media.

To date the outbreak has coincided with a quiet period as far as tourist activity is concerned. However, if it persists into the summer months, the effect upon the industry will be more severe than it is currently. On current evidence there appears to be a 20% to 25% decline in business due to the outbreak in England, but a far larger fall in activity in Wales. Even on pessimistic evidence the aggregate effect upon the industry as a whole is likely to be manageable; however, this ignores the highly inequitable distribution of

[44] This section was written by Jane Hough in Economic Policy and Statistics Section

[45] Second Tourism Summit, 6 March 2001 – paper by Department of Culture, Media & Sport. Available on the internet at: http://www.culture.gov.uk/PDF/tourism_govt_report.PDF

[46] *Labour Force Survey Quarterly Supplement*, February 2001, table 19

[47] English Tourism Council press release dated 7 March 2001

[48] "Counting the cost to tourism and farming", *Financial Times*, 15 March 2001

losses. Whereas facilities in towns and cities may be largely unaffected, or may even benefit, rural businesses in some regions face extreme financial hardship.

The ETC reports that early indications are that about a fifth of business is currently being lost, but advance bookings are down by about one third.

A *Financial Times* article from 15 March 2001 calculates that a similar 20 per cent drop applied to Scotland might mean a loss to the tourism industry of around £10 million per week. The Wales Tourist Board has stated that enquiry and booking levels are currently only 25 per cent of the normal level for the time of year.[49]

The Countryside Agency estimates that rural tourism losses will rise to £2 billion by the end of the Easter break.[50]

On 18 March 2001 the *Sunday Times* reported that the Foot and Mouth outbreak could "cost the economy £9 billion and deprive the chancellor of nearly £3 billion in tax revenues".[51] The calculations, which were undertaken by the Centre for Economics and Business Research, indicate that the losses for tourism alone could be £8 billion (£2.7 billion from domestic tourism and £5.2 billion from overseas visitors). If true, this is a loss of income to the industry of just over 10%. According to the same survey, farming and related industries might be affected by up to £3.6 billion. With some of the domestic tourism spending being diverted to other parts of the economy the CEBR estimates that the **net** effect on the economy will be £9 billion.

Other commentators, however, have suggested that the figure above is an over-estimate. Professor Andrew Oswald, from Warwick University, and Professor Kenneth Thomson, from Aberdeen University, writing in *The Times*, stated that:[52]

> … it would be wrong to think that money not spent by visitors in the countryside somehow disappears. It does not. Recent estimates of a loss of £9 billion to the economy are for this reason wildly wrong. Most will be spent elsewhere, and indeed in this country rather than on overseas holidays. Devon tea rooms will suffer, and that will create hardship; yet coffee houses and entertainment arcades and DIY stores in many of our cities will gain.

Since publishing its initial estimate of £9 billion, the CEBR has published its latest *Quarterly Business Forecast*.[53] As a result of the Foot and Mouth outbreak **and** the fall in world stock markets, the CEBR has revised downwards its forecast of economic growth

[49] Wales Tourist Board press release, dated 9 March 2001
[50] "UK countryside businesses set to get rate relief", *Financial Times*, 14 March 2001
[51] "Bill for farms crisis hits £9 billion", *Sunday Times*, 18 March 2001
[52] "Is rural Britain being laid to waste?", *The Times*, 19 March 2001
[53] *Quarterly Business Forecast*, 22 March 2001, Centre for Economics and Business Research

for 2001 from 2.3% to 2.0%. As part of this forecast the CEBR now estimates that the ultimate cost to the economy could be £7 billion.[54]

The Treasury has played down the economic impact of Foot and Mouth. The *Financial Times* has reported Treasury officials as saying that while the outbreak was a big issue for farming and tourism, the aggregate economic impact would be small.[55]

The Institute of Rural Studies at the University of Wales, Aberystwyth, has estimated that if the Foot and Mouth outbreak continues throughout the main summer season then the loss to tourism in Cumbria and Northumberland alone could be £280 million.[56] The equivalent figure for Wales was £480 million.

The Cumbria Tourist Board – which covers the Lake District, one of the areas most affected by the Foot and Mouth outbreak so far – has estimated the effect on tourism. On its website, it states [emphasis shown is from original source]:[57]

> Considerable damage is being done to the Tourism Industry by the inaccurate reporting that the County is closed because of the foot and mouth outbreak. We estimate that between £8m and £10m is currently being lost each week during this, the quieter part of the year. These losses put at least 350 jobs a week at risk. We already know that dozens of people have been made redundant and that almost all recruitment has been abandoned. Once we get into the Easter period, we estimate this figure could rise to around £30m each week unless the public hears the message that **WE ARE OPEN FOR BUSINESS**.

In recent years there has been a move towards diversification within the farming industry, and there is now a significant degree of overlap between agriculture and tourism in rural areas. The *Financial Times* reports that the proportion of farms with some income from sources outside agriculture stood at 62% in 1999 and non-agricultural income made up 37% of total farm income.[58]

C. Government action

On 14 March 2001 the Government convened a new Rural Taskforce. The details were outlined in a press release from the DETR:

> Set up at the request of Prime Minister Tony Blair, the Task Force is urgently examining the effect across the rural economy as a whole of the outbreak of foot and mouth disease. Representatives of small businesses, hoteliers, communities,

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54 "Epidemic could cost economy £7bn, says report", *Financial Times*, 23 March 2001
55 "Epidemic could cost economy £7 billion, says report", *Financial Times*, 23 March 2001
56 "The 2001 Foot and Mouth Outbreak: Economic Arguments against an Extended Cull", Peter Midmore, Institute of Rural Studies, University of Wales, Aberystwyth, 2001
57 http://www.golakes.co.uk/
58 "Absence of customers takes its toll on farm attractions market", *Financial Times*, 26 March 2001

> farmers and others joined government ministers to start work on a package of measures to help ease hardship within the rural community.

The key responsibilities of the taskforce are as follows:

- improving advice for the parts of the countryside which can be safely visited by the public;
- restoring confidence, both at home and abroad, in the tourist industry;
- identifying the full range of short term practical help to sustain the rural community.

Following its second meeting on 20 March 2001, the Environment Minister, Michael Meacher,[59] made a statement to the House of Commons outlining a range of measures being taken both by the Government and other bodies. Those relating more specifically to rural businesses are:

- Extra funding will be made available to tourist boards to help them promote rural attractions;
- The Inland Revenue and Customs & Excise will take a "very sympathetic approach" to businesses experiencing financial problems as a result of the foot and mouth outbreak. The revenue departments already have powers in specific circumstances to defer payment of taxes and national insurance contributions and to agree extended payment arrangements. They will use this flexibility for agricultural, transport, tourism and related retail businesses in the countryside.
- The Government is working with the Small Business Service and the banks on how they can ensure continuing credit for small businesses badly affected by the outbreak. The major banks have given an undertaking to look at options on a case-by-case basis such as extended lines of credit, capital repayment holidays and other measures.
- The current scheme for 50 per cent mandatory rate relief for village shops already in operation will be extended to all food shops in small rural settlements. The Government will also lay regulations to extend mandatory rate relief to sole village pubs and garages where the rateable value is under £9,000.
- Local authorities will also consider using existing powers to allow deferred payment of business rates.
- Changes to the rules relating to valuations and appeals for rates were also announced.

On 22 March 2001 further details about rate relief in the light of the Foot and Mouth outbreak were published by the DETR.[60] Please refer to Section VI for more information.

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[59] HC Deb 20 March 2001 c191-192

[60] DETR press release 163/01 dated 22 March 2001

D. Other assistance for the tourism industry

During a meeting of the Wales Tourist Board on 9 March 2001, a support campaign was agreed, to help the Welsh tourism industry during the current Foot and Mouth outbreak. This includes an additional £100,000 on a tactical communications and marketing initiative to provide information about the possibilities that are still available, despite the outbreak.[61]

The Federation of Small Businesses has set up a fund of £500,000 to provide interest free loans to members adversely affected by the outbreak who do not qualify for government help.[62]

The Church of England ARC-Addington Fund, set up by the Archbishops of Canterbury and York, is expected to top £3 million following collections in churches throughout the country on Mothering Sunday.[63] This amount includes part of the £500,000 donation made by the Prince of Wales. The fund is now a registered charity and provides grants of up to £2,000 to farmers and others affected by the Foot and Mouth outbreak.

E. Advice for tourists

A number of telephone hotlines and internet sites have been developed to assist people planning holidays in the countryside. The following notes provide a small selection.

The ETC launched a telephone hotline on 22 March 2001. This is intended as a "gateway" service, which will steer callers to sources of further information such as Regional Tourist Boards and Tourist Information Centres. These organisations will then be able to provide specific assistance. The telephone number is 0870 2415659 and calls will be answered from 0800 to 2200 every day of the week.

The British Tourist Authority (both in the UK and in its network of overseas offices) is providing up-to-date advice to visitors from other countries.

The Government has established a website that acts as a central reference point providing links to the websites of several different tourism-related organisations. This can be accessed at**:**

http://www.co-ordination.gov.uk

61 Wales Tourist Board website, available at: http://www.wales-tourist-board.gov.uk
62 Federation of Small Businesses press release, 20 March 2001
63 "Churches offer prayers and £3m in cash", *The Times*, 26 March 2001

Other organisations have also issued specific advice for visitors, explaining which tourist attractions and areas are open and closed at the moment. These include the National Trust, English Heritage, the Ramblers' Association, the Forestry Commission, British Waterways and the Caravan Club.

VI Rate relief[64]

A. Introduction

This part of the paper describes a number of new and existing rate relief measures which may be of benefit to businesses affected by foot and mouth disease. In particular, it gives details of the long-standing hardship relief scheme under the *Local Government Finance Act 1988* [section C] and the Government's announcement of an emergency extension to the scheme on 20th March 2001 [section D]. A forthcoming paper, *Rural Rate Relief*, will give a more comprehensive account of measures relevant to rural businesses.

B. Agricultural relief

There is a general exemption from rates for agricultural land and buildings under Schedule 5 of the *Local Government Finance Act 1988*. The Schedule contains a list of various types of agricultural land and buildings which are specifically included or excluded.

The statutory definition of agricultural land and buildings has been augmented by caselaw over the years when the courts have decided whether particular land does or does not qualify for the agricultural exemption. Where there is an appeal the courts must decide each case on its facts and in the light of the statutory definitions and caselaw, but they must ignore any minimal use of land or buildings for other purposes and so must draw some fine distinctions. To take a few examples, the courts have decided that the agricultural exemption does not apply in cases of land used for motorcycle racing on a few afternoons a year, land used for grazing on a golf course and in the centre of a racecourse, a field used once a year for point-to-point racing and where land was used as a training gallop. The courts have also ruled that the exemption does not apply where a building is used as a grass-drying building, an auction hall occupied by a society of local growers, a building used for wool processing and a shop for farm and other produce.[65]

C. Hardship relief

Under section 49 of the *Local Government Act 1988*, billing authorities in England and Wales (ie. those councils which are responsible for sending out rates bills) may reduce or

[64] This section was written by Edward Wood in Home Affairs Section

[65] The *Encyclopaedia of Rating and Local Taxation*, Sweet & Maxwell, looseleaf, para 2-315, gives details of caselaw on the agricultural exemption

remit the rates bill faced by any ratepayer, including businesses, subject to the following conditions:

a) the ratepayer would sustain hardship if the authority did not do so; and
b) it is reasonable for the authority to do so, having regard to the interests of local council tax payers.

Section 156 of the *Local Government etc. (Scotland) Act 1994* introduced parallel provision for Scotland.[66]

The word *hardship* is not defined in the *1988 Act*, and in deciding what counts as hardship local authorities have had to rely on caselaw arising from similar provision under previous legislation.[67] The 1996 report of the Royal Institution of Chartered Surveyors National Committee on Rating, *Improving the Rating System* (the Bayliss report), called for a statutory definition of hardship to help authorities decide whether or not to give relief.[68]

The second condition for granting hardship relief concerns a council's duty to consider the interests of its council tax payers in exercising its discretionary powers. A Practice Note issued by the Department of the Environment in 1990 contains guidance on this point:

> 75% of the cost of any reduction or remittance of rates can be offset against an authority's payment into the national non-domestic rate pool: 25% must be borne locally and met from the authority's General Fund;
>
> The 'interests' of council taxpayers in an area may go wider than direct financial interests. For example, where the employment prospects in the area would be worsened by a company going out of business, or the amenities of an area might be reduced by, for instance, the loss of the only shop in a village;
>
> Where the granting of relief would have an adverse effect on the financial interests of taxpayers, the case for a reduction or remission of rates payable may still on balance outweigh the cost to taxpayers.[69]

The guidance points out that 25% of the cost of rate relief must be borne locally: the remaining 75% is met by central government. As local authorities have no power to spread such a cost amongst other non-domestic ratepayers, the extensive use of section 49

[66] By inserting a new section, s25A, into the *Local Government (Scotland) Act 1966*
[67] *General Rate Act 1967*, Schedule 1, para 3A. See, for example, *R v Liverpool City Council, ex parte Windsor Securities* [1979] R A 159; and *Wakefleld Metropolitan District Council v Huzminor Investment Developments Ltd* [1989] R V R 108
[68] Royal Institution of Chartered Surveyors (RICS): National Committee on Rating. Improving the Rating System, 1996, pp 32-3
[69] *Non-Domestic Rates: Discretionary Rate Relief* August 1990 para 6(3)(iv-vi)

powers would probably lead to increases in the council tax or reductions in existing services.

It should also be noted that the reduction or remission of rates under section 49 is entirely at the discretion of the local authority. There is no question of ratepayers having a right to relief if they satisfy the relevant conditions. On the other hand a council should not decide in advance that it will *never* give relief (or that it will always give relief) as the Practice Note points out:

> Although authorities may adopt rules for the consideration of hardship cases, they should not adopt a blanket policy either to give or not to give relief: each case should be considered on its own merits.
>
> Any such blanket policy would be open to judicial review on the grounds that the council had fettered its discretion and was therefore acting outside its powers *(ultra vires).* A council must also be seen to be acting reasonably in turning down an application for relief.[70]

A *DoE Press Notice* of 18 May 1992 commended a formal policy adopted by Test Valley District Council giving officers delegated powers to approve reductions in rates bills where hardship would otherwise result and where local taxpayers' interests would be adversely affected by loss of amenity.[71]

The Federation of Small Businesses has drawn attention to the fact that the power to grant hardship relief tends to be used rarely by authorities. The Federation has campaigned for the law to be changed to require local authorities to advertise on rates bills the fact that relief is available, and has blamed the difficulty some businesses have found in getting relief on the discretionary nature of the scheme.[72]

The Financial Times of 17th March 1999 reported that Birmingham city council had agreed to waive Rover's £4 million annual rates bill at the Longbridge plant for three years, under section 49, in an effort to help secure the 12,000 jobs at the site.[73] The relief was dependent on a commitment by BMW to a programme of investment in the plant. The then leader of the council, Theresa Stewart, said:

> Given the exceptional importance of the Longbridge plant to the future of the Birmingham and West Midlands economy, I firmly believe that the remission of rates is in the best interests of Birmingham council taxpayers if it helps secure the survival of the plant and the additional investment it needs for the future."

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70 Op cit, para 6.3(i)
71 339/92 "John Redwood highlights relief for businesses"
72 FSB Press Release "Town halls hide UBR lifebelts during the storm", 4 February 1992
73 "Council agrees to waive rates at Longbridge plant"

Relief was never given due to BMW's subsequent decision to sell the Longbridge plant.

Official communications on hardship relief have stressed that in considering hardship relief, authorities should be aware of the European Union's rules on State Aid, which are designed to ensure fair competition among businesses across the EU. For example, a letter to local authorities from the Welsh Assembly stated:

> Hardship relief granted under section 49 of the Local Government Finance Act 1988 may constitute state aid, in which case it would first be necessary to clear it with the European Commission. Clearance by the Commission should be sought via the Department of the Environment Transport and the Regions (DETR) and any possible state aid should be advised to us in the first instance.[74]

In March 2001, in response to the problems resulting from the foot and mouth outbreak, the Government announced a modified version of the existing hardship relief scheme for small businesses in rural areas. This temporary scheme is dealt with in the next section.

D. Foot and Mouth Disease: emergency relief

On 20th March 2001 the Environment Minister, Michael Meacher, made a statement on the work of the Rural Task Force.[75] He announced, amongst other things, "a preliminary package of measures to alleviate the immediate financial hardship of small businesses in rural areas which have been badly hit by the sudden drop in visitors and other knock-on effects of the foot and mouth disease". Mr Meacher listed a number of business rate measures, including some new proposals and some existing avenues for obtaining relief:

- Central government contribution to hardship rate relief will be increased from 75% to 95% for "small business in rural authorities in areas of greatest need and who are suffering greatest hardship as a result of FMD";
- Affected businesses can apply to the Valuation Office Agency for a temporary reduction in their rateable value;
- The *Rating (Former Agricultural Premises and Rural Shops) Bill*, which received a first reading on 16th March 2001, would extend mandatory 50% rate relief to all food shops in small rural settlements.
- The Government will lay regulations to extend mandatory 50% rate relief to sole village pubs and garages with a rateable value of less than £9,000.

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74 Business Rates Information Letter (4/2001), 13.3.01, available at: www.wales.gov.uk/newsflash/content/finance/info_letter%204-2001.html

75 HC Deb 20.3.01, c191

- Local authorities will consider using their existing powers to allow deferred payment of rates.

The emergency extension of the hardship relief scheme applies in England only: the Welsh Assembly and the Scottish Executive are expected to make announcements on rate relief very shortly.

A Department of the Environment, Transport and the Regions press release of 22nd March 2001 gave further details of the Government's proposals.[76] Businesses with a rateable value of £12,000 or less in rural local authority districts which adopted the scheme would be eligible for 100% rate relief, "initially" for a three month period, providing they can show that they have suffered serious economic loss through the impact of foot and mouth disease. For such businesses, 100% relief over three months would be worth up to £1,290. The press release stated: "The scheme will allow impacts beyond three months to be kept under review".

The Government promised to underwrite 95% of the cost to local authorities of giving relief. Small businesses in other areas, and businesses with properties above £12,000 rateable value in any area, would be eligible to apply for hardship relief under the existing provisions [see Part I of this paper] if they have been seriously affected by foot and mouth disease. In these cases the council would, as usual, fund 25% of the cost, with central government funding 75%. The 151 rural local authorities in England where the scheme would operate are listed below (source: DETR, 27th March 2001)

FMD Emergency Rate Relief: List of Rural Local Authorities

Eastern Region	**South East**	**South West**
Babergh	Arun	Caradon
Braintree	Ashford	Carrick
Breckland	Aylesbury Vale	Cotswold
Broadland	Canterbury	East Devon
East Cambridgeshire	Cherwell	East Dorset
East Hertfordshire	Chichester	Forest of Dean
Fenland	Chiltern	Isles of Scilly
Forest Heath	Dover	Kennet
Huntingdonshire	East Hampshire	Kerrier
Kings Lynn & West Norfolk	Horsham	Mendip
Maldon	Isle of Wight	Mid Devon
Mid Bedfordshire	Lewes	North Cornwall
Mid Suffolk	Maidstone	North Devon

76 "Government aid to reduce rates bills for small businesses badly affected by foot and mouth disease", available at www.press.detr.gov.uk/0103/0163.htm

North Norfolk South Bedfordshire South Cambridgeshire South Norfolk St Edmundsbury Suffolk Coastal Tendring Uttlesford Waveney	Mid Sussex New Forest Rother Sevenoaks Shepway South Oxfordshire Tandridge Test Valley Thanet Tonbridge and Malling Tunbridge Wells Vale of White Horse Waverley Wealden West Berkshire West Oxfordshire Winchester Wycombe	North Dorset North Wiltshire Penwith Purbeck Restormel Salisbury Sedgemoor South Hams South Somerset Stroud Taunton Deane Teignbridge Tewksbury Torridge West Devon West Dorset West Somerset West Wiltshire

North East	**Yorkshire and the Humber**	**East Midlands**
Alnwick Berwick-upon-Tweed Castle Morpeth Derwentside Durham City Easington Redcar and Cleveland Sedgefield Teesdale Tynedale Wear Valley	Craven East Riding of Yorkshire Hambleton Harrogate North Lincolnshire Richmondshire Ryedale Scarborough Selby	Bassetlaw Boston Daventry Derbyshire Dales East Lindsey East Northamptonshire Harborough High Peak Hinckley and Bosworth Melton North West Leicestershire Newark and Sherwood North Kesteven Rushcliffe Rutland South Derbyshire South Holland South Kesteven South Northamptonshire West Lindsay

West Midlands	North West
Bridgnorth	Allerdale
East Staffordshire	Carlisle
Herefordshire	Chester
Malvern Hills	Congleton
North Shropshire	Copeland
North Warwickshire	Crewe and Nantwich
Oswestry	Eden
Shrewsbury and Atcham	Ellesmere Port and Neston
South Shropshire	Lancaster
South Staffordshire	Pendle
Staffordshire Moorlands	Ribble Valley
Stratford-on-Avon	South Lakeland
Wychavon	Vale Royal
	Wyre

The DETR press release stated that the authorities covered by the scheme included all the areas in England most seriously affected by Foot and Mouth Disease as well as rural areas that are less seriously affected. 78% of the 390,000 total of business properties in the authorities listed would be eligible to apply for relief under this scheme; of these it was estimated that 50,000 will apply for a reduction.[77]

Guidance to local authorities on the operation of the emergency scheme was issued by DETR on 27th March 2001.[78]

E. *Rating (Former Agricultural Premises and Rural Shops) Bill*

This Government Bill, which received a first reading on 16th March 2001, provides rate relief for two types of rural businesses. No date for second reading has been set.

The Bill extends to both England and Wales but allows for separate commencement powers to be exercised by the National Assembly for Wales and for the power to make orders in relation to Wales to be exercised by the Assembly. Similar proposals, in addition to a general relief scheme for small businesses, are contained in a Scottish Executive consultation paper of 15th February 2001, *Rate Relief for Small Businesses*.[79]

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77 DETR press release 22.3.01, "Government aid to reduce rates bills for small businesses badly affected by foot and mouth disease", op cit

78 Available at: www.local.detr.gov.uk/finance/busrates.htm

79 Available at: www.scotland.gov.uk/consultations/enterprise/rrsb-00.asp

1. Non-agricultural premises on what had previously been agricultural land and buildings

The explanatory notes to the Bill describe this new scheme of temporary rate relief as follows:

> The bill establishes a 50% mandatory rate relief scheme for land and buildings used for non-agricultural purposes on what had been agricultural land and buildings for at least 183 days during the year prior to the date on which the provisions come into force. The mandatory relief will not be available to stud farms which already benefit from an existing concession that reduces their rateable value. Local authorities will have a discretionary power to increase the relief to 100% where they feel the changed use will be of benefit to the wider community - new stud farms on previously agricultural land will also be able to qualify for this discretionary relief.
>
> Both mandatory and discretionary relief will initially be limited to maximum of 5 years, with a provision for this to be extended by Order made by the Secretary of State. However, premises that include land and buildings already qualifying for relief prior to any extension will only receive relief for a maximum of 5 years from the date the original land and buildings first qualified for relief. It is intended that relief will be limited to properties with rateable values of less than £6,000.[80]

2. Extension of mandatory 50% rate relief to village food shops

The *Local Government and Rating Act 1997* gives mandatory 50% rate relief to the sole village general store and post office in rural settlements. The current bill extends this scheme to all village shops that sell mainly food for human consumption, excluding the provision of catering and confectionery. The shops must have a rateable value of not more than £6,000, the same as the existing threshold for general stores and post offices. Food shops receiving mandatory relief will also be eligible for top-up relief of up to 100% at the discretion of the local authority.

Further details on the Bill, and the existing scheme for village shops and post offices, will be given in a forthcoming Research Paper on rural rate relief.

F. Business Rate Appeals

The Department of the Environment, Transport and the Regions press release of 22nd March 2001 announced that businesses in rural areas considering appeals against their business rate valuation (whether because of foot and mouth disease or not) will have an additional period of three months from 31 March in which to make such an appeal, so that

[80] Bill 68 – EN, Paras 3-4, available at: www.publications.parliament.uk/pa/cm200001/cmbills/068/en/01068x--.htm

the benefit of any resulting change can take effect between 1 October 2000 and 31 March 2001:

> In the 118 rural authorities in England, we are also extending by 3 months to 30 June 2001 the deadline for making appeals against business rate valuations, both those arising from FMD and those made for any other reason. Changes in value arising from appeals made in these areas before the new deadline, will take effect from 1 October 2000, or the date of any change in the property, whichever is the later. Changes in value arising from appeals made after 30 June 2001 will take effect from 1 April 2001, or the date of any change in the property, whichever is the later. In other areas the deadline will remain 31 March 2001 if appeals are to take effect before 1 April, or 30 April 2001 for appeals arising from changes to the property which first occurred during March.[81]

G. Other measures

The DETR press release of 22nd March 2001 described the following additional features of the rating system which could be used to assist businesses facing difficulties as a result of foot and mouth disease:

- Local authorities have powers to defer the payment of rates to provide short-term help to businesses.
- Businesses can also apply to their local valuation office for a temporary reduction in their rateable value to reflect loss of business due to FMD.[82]

VII The 1967 outbreak of Foot and Mouth Disease

The 1967 outbreak was not the first, and before then small outbreaks had been common. A dissenting note to the official report on the 1967 outbreak noted that for whatever cause, the UK had not been free of the disease for any period longer than 2.75 years (and that only once) since 1954…[83] The policy that was adopted after the 1967 outbreak, of controlling imports from countries where the disease is endemic, has been a success. There was one single outbreak on the Isle of Wight in 1981,[84] apparently caused by airborne virus from infected herds in Northern France spreading infection to cattle in Jersey and the Isle of Wight.[85]

The 1967 outbreak, by far the worst in the UK, was centred on the West Midlands and Welsh borders with cases across the Midlands. The vast majority of the 2000 outbreaks

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81 "Government aid to reduce rates bills for small businesses badly affected by foot and mouth disease", op cit

82 ibid

83 MAFF, *Report of the Committee of Inquiry on Foot-And-Mouth Disease 1968 Part One*, April 1969, Cmnd 3999, p 99

84 HC Deb 16 April 1981 c 223W

85 MAFF, *Foot and Mouth Disease leaflet*, 1994, p 3

were in Cheshire, Staffordshire, Montgomeryshire, Shropshire, Denbighshire and Flintshire. The Report on the 1967 FMD outbreak summarised the report on the origins of the disease by MAFF's Chief Veterinary Officer, who dismissed any link to an earlier outbreak in Warwickshire in September 1967:

> 72 The Chief Veterinary officer concluded that the most likely source of infection was frozen Argentine lamb which might have been supplied to the farm during October. A consignment of 770 frozen lamb carcasses from Establishment 1408 in Argentina had been widely distributed in Cheshire and Shropshire between August and November, following importation on 25th August. The Chief Veterinary Officer drew attention to the large number of outbreaks which were reported almost simultaneously over a wide area; he suggested that there might have been a number of primary outbreaks at about the same time and that there was a possible link with the imported frozen lamb carcases.[86]

The Report noted the scale of the outbreak:

> 97 The 1967/1968 epidemic was the most serious experienced in Great Britain within this century. The numbers of stock slaughtered during the period October 25th, 1967 to June 4th, 1968 were 211,825 cattle, 108,345 sheep, 113,766 pigs and 51 goats…

It noted that the costs spread well beyond agriculture but considered that such costs could not really be estimated. It tried to estimate the cost to agriculture:

> 99 The direct cost of the 1967/1968 epidemic is estimated at £35.1 million largely made up of costs borne by the Ministry of Agriculture. The main item in this total is the cost of compensation which is provisionally estimated at £26.66 million. Another large item consists of payments for valuing, slaughtering and burying or cremating animals, and for disinfection; these amounted to some £4.2 million. Another major item is the additional staff costs incurred by the ministry of Agriculture which amounted to some £2.8 million. Other direct costs are included in the total, such as special ploughing grant payments and the £ for £ extra compensation scheme.
>
> 100 The indirect costs might be divided into two groups. The first group would cover the loss of income arising from the slaughter of diseased animals and animals that had been in contact with them, for though the farmer is fully compensated for the slaughter of his stock he is still involved in losses. Compensation represents the capital value of the farmers' slaughtered herd which enables him in good time to replace his stock – assuming there has been no upward movement in prices. The operation of the various control measures, however, normally introduces a delay between the time of slaughter and of

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[86] MAFF, *Report of the Committee of Inquiry on Foot-And-Mouth Disease 1968 Part One*, April 1969, Cmnd 3999 paragraph 72

> replacing stock, and because of this and other factors the farmer loses income for which no cash compensation is made. The next group would include costs arising from the general disruption of agricultural production, marketing, and distribution following the imposition of control measures. For long periods during the 1967/1968 epidemic movements of stock were substantially restricted. In particular, the normal pattern of store stock production and marketing was seriously disrupted; from 24th November, 1967 to 31st January, 1968 for example, the whole of Great Britain was a Controlled Area and livestock markets were closed throughout the country.
>
> 101 Some of the indirect costs could be quantified if basic assumptions were adopted, but there is scope for a wide divergence of views in relation to these. Different sets of assumptions would result in considerable differences in the calculations and we considered that the limitations were such that it would require extensive research. However, in a prolonged outbreak the indirect costs are likely to be proportionately greater. Such estimates as we received of direct and indirect costs ranged from £70 million up to £150 million. The estimates in the lower half of this range were the result of extensive studies. A point of some significance is that part of the indirect costs were borne by farmers who did not have the disease on their farms; we received evidence that a substantial number of such farmers had suffered heavy losses….

VIII What the Government has done in compensation for farmers

Farmers are compensated for the value of the livestock destroyed under long-established legislation. The following PQ shows that farmers should receive a fair price for the animals:

> **Mrs. Ray Michie:** To ask the Minister of Agriculture, Fisheries and Food on what basis farmers whose healthy livestock are compulsorily slaughtered are compensated.
>
> **Ms Quin:** The level of compensation is set out in Schedule 3 of the Animal Health Act 1981. Where the animal slaughtered was affected with foot and mouth disease, compensation shall be the value of the animal immediately before it became affected. In every other case, (eg animals exposed to infection but not affected) compensation shall be the value of the animal immediately before slaughter.[87]

Valuation, however, takes time and cannot be easy in the conditions of an ever-increasing cull. Therefore on 25 March, the Government made another Order, offering the option of accepting a "standard value" if the farmer did not wish to have an animal valued by a valuer he/she can accept a standard value instead.[88]

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[87] HC Deb 12 March 2001 c 484W

[88] The Foot-and-Mouth Disease (Ascertainment of Value) (No.3) Order 2001

A letter to a newspaper from a beef farmer showed a situation in which farmers might lose, even though compensated:

> Practically all beef here in Scotland comes from cattle raised on grass. At present, my cows would receive their market value. If I had to replace them, I would have to put the new cows in calf – gestation period nine months – then keep the progeny for two years before I could sell them as beef. Assuming it takes three months before the cows get in calf, this means three years before any income. This is why foot and mouth is so serious for the countryside.[89]

The situation is even worse for those with "hefted" sheep, as in the Lake District and other nearby areas where sheep are not fenced in. The ewes teach the lambs to live on the land and they know their own boundaries. It is unclear how such sheep could be replaced if the flocks were slaughtered.

On Tuesday 27 February, the Minister announced emergency aid for the livestock sector, to supplement the compensation for slaughtered animals. That aid came from existing schemes, possibly because any new scheme would require the consent of the European Commission:

> I intend with the consent of the Chancellor of the Exchequer, to draw money forward from years 2 and 3 of the pig industry restructuring scheme, so that I can keep the outgoers elements of the scheme open for further applications. This is to help those farmers who have now decided, because of the FMD that they would like to reconsider whether they wanted to continue in the industry. It's to help them make a bid for the outgoers scheme…
>
> The UK government will be contacting the Commission, either tonight or tomorrow morning, to inform them that we intend to draw down both the compulsory – of course the compulsory element – but also the non-compulsory element of agro-monetary compensation for the beef, for the sheep and for the dairy regime. The total sum of money involved in this, in the non-compulsory element, is £152m. There is a small compulsory element of £16m which of course we will pay as well, as we would be obliged to do.[90]

The Minister has also introduced the Welfare of Livestock (Disposal) Scheme to deal with the problems faced by farmers whose farms do not have FMD, but whose animals cannot be sent to market because of the movement restrictions. Farmers with eligible animals can choose to enter them into the scheme to be sent to the abattoir and slaughtered in exchange for fixed compensation.

The opening of the scheme was announced on 22 March 2001.[91]

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89 "The real costs of foot and mouth", *Independent on Sunday*, 18 March 2001

90 Minister's Statement, 27 February 2001, http://www.maff.gov.uk/animalh/diseases/fmd/minister.htm

91 MAFF News Release 111/01, *Foot and Mouth Disease – Welfare of Livestock (Disposal) Scheme Launched*, 22 March 2001