# ECONOMIC EVALUATION OF DEFRA'S BEE HEALTH PROGRAMME

## X Introduction

1. In November 2000, the Department commissioned ADAS Consulting Limited to undertake, as part of the rolling programme of economic policy evaluations, a review of its Bee Health Programme.

2. The terms of reference of the evaluation were to consider the rationale and objectives of the programme; its effectiveness against objectives; value for money; and to make recommendations on the appropriate role for government, the means of delivery, performance indicators and the appropriate mix of measures. The evaluation focused on England only. The ADAS Report and recommendations arising therefrom were finalised and produced in July 2001. The Report has since been published on the DEFRA Internet website.

## 🖹 <u>Findings</u>

3. The ADAS researchers concluded in their findings that bee health has publicgood dimensions in that the benefits to society arising from pollination, including commercial crops, domestic and wild plants, are much larger than the private benefits accruing to beekeepers in the form of value of honey and other products. Given this and the highly fragmented structure of beekeeping activity in England, they also concluded that there is a continuing public sector interest in activities that support bee health.

4. The Report also demonstrates a substantial benefit:cost ratio for the whole Bee Health Programme, the resources of which the researchers judged to be efficiently managed and appropriately deployed.

## **<u>Recommendations</u>**

5. Against this background, the Report makes the following recommendations (references in the Report to the Ministry of Agriculture, Fisheries and Food (MAFF) have been replaced here by the Department for Environment, Food and Rural Affairs (DEFRA)):

- (i) DEFRA should revise and consolidate the legislation on bee health.
- (ii) The objectives and implementation plans of the Bee Health Programme should be better documented. The plans prepared for the (DEFRA) Plant Health Programme

might form a useful model, although the much smaller resources of the Bee Health Programme require something briefer.

- (iii) Steps should be taken to raise the proportion of the keepers of bees registered. These steps should use the Memorandum of Understanding (MoU) with the Central Science Laboratory to incentivise the National Bee Unit (NBU) to register more keepers of bees in Beebase, introduce legislation requiring the identification of all nonferal colonies with telephone numbers of their keepers and improve information about the benefits of registration and how to register.
- *(iv)* Serious consideration should be given to methods of estimating more accurately the numbers of keepers of bees and of honeybee colonies in England, even if only periodically. Indicators should be output based and built into the business plan.
- (v) A code of practice on the storage and disposal of imported bee products should be drawn up and promoted.
- (vi) The evaluation team endorses the cautious approach the UK has taken for over twenty years on bee imports. More scientific and economic risk assessment will be required to compile the evidence to support decisions on importation of bees.
- (vii) The UK should work with the (European) Commission and its EU partners to harmonise requirements for importation of bees from third countries.
- (viii) DEFRA should consider whether the balance of research spending should now be changed to fund more European foulbrood (EFB) and policy related research needs.
- (ix) A strategy document to cover training, information and extension should be prepared by NBU and simple, measurable and achievable targets from it should be built into the NBU's MoU.
- (x) The evaluation team recommends that the current arrangements for funding the Bee Health Programme from public funds should continue.
- (xi) A method should be sought to protect small bio-security programmes of this sort from general attempts to cut public expenditure - so called salami slicing. Less frequent, more fundamental reviews of spending programmes may be the appropriate route.

## **<u>DEFRA Response</u>**

6. DEFRA's response to the ADAS recommendations is set out in the **Action Plan** detailed below.

# ADAS RECOMMENDATIONS AND DEFRA RESPONSE: ACTION PLAN

## **Recommendation 1**

DEFRA should revise and consolidate the legislation on bee health.

## **DEFRA** response

**Accept**, notably with regard to *The Bee Diseases Control Order 1982*. An initial meeting comprising representatives from Horticulture and Potatoes (HRP) Division, the Central Science Laboratory's National Bee Unit (NBU) and DEFRA Legal, was held on 1 October 2001. A provisional list of items that may warrant revision was drawn up for discussion with representatives of the beekeeping sector on 8 November, and subsequently. In light of this, we will be drawing up instructions to Legal for a negative resolution Statutory Instrument (S.I.) consulting as necessary with Agriculture Departments in the Devolved Administrations, beekeeping associations and other interested parties. Target date for S.I to be in place is June 2002.

## **Recommendation 2**

The objectives and implementation plans of the Bee Health Programme should be better documented. The plans prepared for the (DEFRA) Plant Health Programme might form a useful model, although the much smaller resources of the Bee Health Programme require something briefer.

## **DEFRA** response

**Accept**. Targets will be refined in the context of the HRP Divisional Business Plan for 2002/03.

## **Recommendation 3**

(xii) Steps should be taken to raise the proportion of the keepers of bees registered. These steps should use the Memorandum of Understanding (MoU) with the Central Science Laboratory to incentivise the NBU to register more keepers of bees in Beebase, introduce legislation requiring the identification of all non-feral colonies with telephone numbers of their keepers and improve information about the benefits of registration and how to register.

#### DEFRA response

**Accept in part**. As the Report acknowledges, compulsory registration (of beekeepers) would not bring sufficient benefits to justify the cost of operation and enforcement. However, a more comprehensive database would improve disease control efforts and HRP will pursue with the NBU and beekeeping associations possible means and incentives to achieve this. Target date for completion – Summer 2002.

## **Recommendation 4**

Serious consideration should be given to methods of estimating more accurately the numbers of keepers of bees and of honeybee colonies in England, even if only periodically. Indicators should be output based and built into the business plan.

#### DEFRA response

**Accept**. We welcome the estimate provided by ADAS that there are about 230,000 colonies of bees in England. Improvements to estimating their numbers are in part dependent on action resulting from <u>Recommendation 3</u> above. HRP and NBU will discuss the practicalities of wider periodic surveys, consulting beekeeping associations as appropriate. Any revisions will be reflected in future business plans and the UK National Honey Programme. Target date for completion – Summer 2002.

## **Recommendation 5**

A code of practice on the storage and disposal of imported bee products should be drawn up and promoted.

#### DEFRA response

**Accept**. We have considered this recommendation with the NBU also in the context of <u>Recommendation 1</u> above. A code of practice will be developed and disseminated by Autumn 2002.

## **Recommendation 6**

The evaluation team endorses the cautious approach the UK has taken for over twenty years on bee imports. More scientific and economic risk assessment will be required to compile the evidence to support decisions on importation of bees.

## DEFRA response

**Accept**. We welcome the endorsement of policy to date. We fully accept that scientific and economic risk assessment is integral to our bee import policy, as evidenced by our response to requests originating from the authorities in New Zealand and Australia. In the longer term, and subject to resources, development of the NBU's BeeRAM as a modelling tool for spread of disease could prove a useful tool in such assessments.

## **Recommendation** 7

The UK should work with the (European) Commission and its EU partners to harmonise requirements for importation of bees from third countries.

## **DEFRA** response

**Accept in principle**. However, the legal position presently is that under *Council Directive 92/65/EEC* (the 'Balai' Directive), which lays down animal health requirements governing trade in and imports into the Community of animals, semen, ova and embryos not subject to animal health requirements laid down in specific Community rules referred to in Annex A(I) to Directive 90/425/EEC, consignments of bees may be moved between Member States provided only that they come from an area which is not the subject of a prohibition order associated with an occurrence of American foulbrood disease (AFB) and are accompanied by a health certificate confirming freedom from AFB. Nevertheless, and even though we are not optimistic about progress, DEFRA will seek to pursue the scope for harmonisation in the coming year through the Office International des Epizooties (OIE), Standing Veterinary Committee and the EU Honey Programme Management Committee fora.

## **Recommendation 8**

DEFRA should consider whether the balance of research spending should now be changed to fund more European foulbrood (EFB) and policy related research needs.

## DEFRA response

**Accept**. The balance has already been revised away from varroa in the context of a limited competition on exotic bee diseases. And, EFB is the subject of a bee health project that is currently being funded under DEFRA's Horticulture LINK programme. However, the balance and nature of our future R&D spend will be kept under review. In particular, as the picture becomes clearer on the extent of

any further spread of varroa resistance to insecticide treatment, following discovery of the first known case in the UK shortly after production of the ADAS Report.

## **Recommendation 9**

A strategy document to cover training, information and extension should be prepared by NBU and simple, measurable and achievable targets from it should be built into the NBU's MoU.

## DEFRA response

**Accept**. Considerable progress had in fact been made prior to the review, for instance in relation to the establishment of the Bee Health Advisory Panel. The NBU will prepare such a document by the end of February 2002 in order that appropriate targets can be built into the MoU for 2002/03 and the UK National Honey Programme.

## **Recommendation 10**

The evaluation team recommends that the current arrangements for funding the Bee Health Programme from public funds should continue.

## **DEFRA** response

**Accept**, although it should be recognised that the Bee Health Programme must compete for funds alongside other DEFRA business priorities.

## **Recommendation 11**

A method should be sought to protect small bio-security programmes of this sort from general attempts to cut public expenditure - so called salami slicing. Less frequent, more fundamental reviews of spending programmes may be the appropriate route.

## DEFRA response

**Accept in principle**. The findings of this external evaluation will be used in spending reviews. Nevertheless, the spend on the Bee Health Programme will, inevitably, compete for funds alongside other DEFRA business priorities. It should also be noted that the NBU has made considerable efficiency gains against a largely static baseline since 1996, and that beekeepers themselves are

progressively assuming greater responsibilities in relation to desirable bee husbandry. This trend is a positive one for both bee health and the taxpayer.

## **<u>K</u>** Conclusion

7. HRP welcomes the detailed evaluation and recommendations. HRP will endeavour to progress the above action plan in consultation with the NBU, Devolved Administrations, beekeeping associations and other interested organisations. Stocktakes of progress will be held at roughly 3 month intervals over the coming year.

> Horticulture and Potatoes Division, Branch A November 2001