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Regulation of bee diseases

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International trade

For thousands of years, and since humans first began to exploit honey bees, both products and bees themselves have been commodities to be traded. In the past few centuries this trade has become worldwide as bees and their products have been shipped between continents, and such commerce has increased considerably in the past few decades. In the future, trade in bees and bee products will continue to increase, as technology makes transport easier and lowers national barriers to commerce.

Benefits of importation

This trade brings benefits to importing countries. Consumers have a greater choice of product, sometimes at lower cost. Bee breeders have access to a range of genetic material, which may potentially increase beekeeping's profitability through access to higher-producing or disease-resistant stock. Allowing legal introduction of bees may reduce the threat posed by illegal importations.

Costs of importation

Importation of bees and bee products may have disadvantages. Bee diseases continue to be spread throughout the world, despite knowledge of the distribution of those diseases and how they are spread by the legal and illegal movement of bee products and live bees. Beekeeping industries and scientists are rightly concerned about such events.

Beekeeping industries also seek protection of their local markets from competitors in other countries. New trading rules for countries which are members of the World Trade Organization (WTO) limit the extent to which international trade can be restricted to protect local producers. The trade framework of the WTO agreements emphasises the benefit to consumers from an open and competitive global marketplace.

It is important for countries to distinguish whether import restrictions on bees and bee products are really to protect bee health or to protect local producers.

Devising sanitary regulations for imports

New multilateral rules governing agricultural trade have a significant effect on international trade in bees and bee products. National laws affecting imports must be objective and justifiable, and adhere to principles set out in international agreements. This section sets out the background to these changes, what the changes entail, and likely consequences for apicultural trade.

The SPS agreement

More than 130 countries are members of the World Trade Organization (WTO). They have agreed to base their regulations for protecting animal health on scientific principles, and not use them inappropriately to restrict trade or to protect domestic industries.

One of the WTO agreements is the 'Agreement on the application of sanitary and phytosanitary measures', commonly known as the SPS agreement (WTO, 1995). The SPS agreement is about how to apply sanitary (human and animal health) measures and phytosanitary (plant health) measures. It establishes principles which bind WTO member countries when they set health-protection measures for the importation of plants, animals and their products. The agreement covers all SPS measures which affect or may affect international trade.

Some regional trade agreements incorporate very similar principles; examples include the North American Free Trade Agreement (NAFTA) and the Closer Economic Relationship (CER) agreement between New Zealand and Australia.

The main principles of the SPS agreement are outlined below.

Necessity of SPS measures

Members have the right to protect the life and health of their animal, plant and human populations, provided the measures taken aren't inconsistent with the SPS agreement. National sovereignty is preserved, but balanced against the commitments made when members committed themselves to the Uruguay Round agreements.

The agreement defines necessity by reference to science rather than politics, as sanitary measures must be based on scientific principles and kept in place only while justified by scientific evidence.

Consistency

Sanitary measures must be applied consistently, and there are three main areas where WTO members have to be careful to avoid what the SPS agreement calls arbitrary or unjustifiable discrimination.

Firstly, discriminating against foreign suppliers is not allowed. This 'national treatment' principle means that imports cannot be treated differently from local trade in the same commodity. For instance a country cannot require imported bees to be free of a disease if there is no similar requirement for locally-traded bees.

The second principle means that WTO members can not discriminate between members where identical or similar health conditions prevail; for instance setting tough health standards for imports from one country while being more liberal with imports from the other.

The third area of consistency deals with how a country is consistent in determining what level of risk it will accept for different areas of trade; different species or products, different countries and even different sectors (for example, the risks accepted for poultry meat imports compared with the level of risk of introducing diseases on beef imports). This aspect of consistency is still the subject of debate in the WTO's SPS committee.

Assessment of risk

Any WTO member must ensure that its sanitary measures are based on an assessment of risk. Risk assessment or risk analysis is a fast-evolving science which helps regulators assemble data in a thorough and consistent way, so their decisions can be made on a sound technical basis. The process also becomes more transparent, so anyone affected by a decision can see the assumptions and decisions made in developing sanitary measures.

Establishing sanitary measures to achieve a level of protection

Once the risk analysis has been performed, regulators must decide the sanitary measures which will achieve the level of protection that is appropriate to their circumstances. Sanitary measures should be suitable to the need, which is dictated by the probability of a pest or disease being introduced or becoming established and the consequences of that happening.

Given a choice of sanitary measures which will deliver the appropriate level of protection, members must choose the one which will have the least restriction on trade.

Equivalence

The agreement also forces a move away from importing countries insisting that particular sanitary measures be applied to animals or animal products. Different health measures used by an exporting country must be accepted by an importing country, if it can be objectively shown that they achieve the importing country's appropriate level of protection.

For example, an importing country could not insist that beeswax was heated at a certain temperature for a certain time, if the exporting country could show that another treatment (say irradiation) delivered the desired level of protection. (For the evaluation of equivalence, the importing country must first state what level of protection it is seeking by application of a sanitary measure, e.g. reducing to the same level the risk of introducing the organism which causes American foulbrood.)

Equivalence will mostly be applied on a bilateral basis, and the agreement envisages members setting up bilateral agreements based on this concept. A number of WTO member countries are developing wide-ranging veterinary agreements based on recognition of equivalence over several product or animal sectors, including honey bees and bee products.

Harmonisation

Harmonising sanitary and phytosanitary measures is an important objective of the agreement, and members are, in general, obliged to base their sanitary measures on international standards, recommendations and guidelines where they exist. For animal health the international standards are those developed by the OIE, the Office International des Epizooties or the world organisation for animal health.

The OIE now has a much more important role than it did in the past. Since 1924 this intergovernmental organisation has worked to share information on animal diseases, coordinate research and harmonise regulations on international trade. Now its recommendations have a new status, and it is vitally important for countries to work to make these scientifically valid and up to date. All sanitary measures based on OIE standards are deemed to be acceptable under the SPS agreement (though of course they still must be applied in accordance with the principles of the agreement).

WTO members may use higher sanitary standards than those developed by the OIE, either if there is scientific justification or if they can demonstrate a need, based on an analysis of risk, for a higher level of protection than the standard would give. Any higher sanitary standard must still not be inconsistent with the other provisions of the SPS agreement.

Regional conditions

Sanitary measures should take account of demonstrable regional variations in health status in the exporting and importing regions. It is no longer appropriate to think of a whole country as being 'infected' with a disease, if there are real differences in the presence or incidence of that disease within the country.

To support a claim that a region is free of a disease or has a low incidence of a disease, an exporting country must provide objective evidence on issues such as effective surveillance, import control measures, and geographical or ecological factors maintaining the disease status.

Transparency

Probably the most immediate change in the way countries operate in the environment created by the SPS agreement has been an opening up of information channels about the sanitary measures they use; commonly called transparency.

Members are obliged to notify other members of proposed sanitary regulations, and allow time prior to implementation for comment (except for emergencies such as outbreaks of serious diseases). Other members are entitled to comment, and have their submissions discussed.

WTO members must also set up single enquiry points, so that any other member may ask about a wide range of sanitary measures including SPS regulations, internal procedures such as manuals used by inspectors, and even the risk analysis procedures used to develop import health standards.

Other provisions

The SPS agreement also covers other areas, including the following:

(i) Members should contribute to relevant international organisations, which for animal health means the OIE, and to the development and review of standards.

(ii) Members are encouraged to provide technical assistance to other members.

(iii) There are special provisions for developing countries, delaying full implementation for five years in the case of least developed countries and two years for other developing countries (from the agreement's entry into force on 1 January 1995).

(iv) The SPS committee which meets in Geneva is charged with implementing the agreement, and has a mandate to provide a forum for discussion on issues such as equivalence and harmonisation.

Likely effects of the SPS agreement on trade in bees and bee products

The SPS agreement provides a framework for increasing trade in bees and bee products while allowing nations to protect bee health where necessary. Changes likely to result from this agreement include reductions in trade barriers and increased market opportunities.

Unjustified requirements

Importing countries are still requiring exporting countries to issue certification that is not justified. Live bee exports must often be tested for, and found free of, diseases which are present in the importing country but not under statutory control. Sometimes processed honey or beeswax must be certified as originating in apiaries which are free of parasites which cannot be transmitted in those products (such as tracheal mite and varroa). Such regulations cannot be justified in light of obligations under the SPS agreement.

Unsustainable regulations

WTO members must bring their national legislation into line with international commitments contained in the SPS agreement. For instance, it is not fulfilling these commitments to ban importation of honey bees from all countries which are not "free of diseases or parasites harmful to honey bees", as this blanket ban does not allow the importing country to fairly assess risk and determine an appropriate level of protection to be achieved through applying sanitary measures.

Sanitary measures based on such legislation are now open to challenge by other WTO members, if they are thought to unjustifiably discriminate between members or against imports.

Trade opportunities

The SPS agreement will make it easier for exporters of bees and bee products to sell their produce on world markets, because WTO members have undertaken to scientifically justify the sanitary measures they impose.

New trade opportunities will arise from:

- (i) New markets. Previously closed markets will be opened up as trade policies are brought into line with SPS principles.
- (ii) Lower compliance costs. The cost of meeting unnecessarily rigid sanitary requirements can marginalise an otherwise viable export operation. As unjustified requirements are removed, these costs will be reduced.
- (iii) Certainty. Exporters will be able to plan ahead with more confidence, as WTO members countries are no longer allowed to impose arbitrary restrictions on another country's export industry.

Implementation

World adoption of SPS principles has not happened overnight, but gradually this agreement will lead to trade in animals and animal products being based on sound science. It has already begun to influence the behaviour of regulators around the world, shifting the burden of proof on to those setting sanitary measures for imported bees and bee products.

The SPS agreement provides for trade to go ahead unless there are valid health reasons for it to be restricted, rather than for trade to be permitted only when this suits the importing country.

The Office International des Epizooties

What is the OIE?

The OIE (Office International des Epizooties) is the world organisation for animal health. Established by international agreement in 1924, it now has over 125 countries and territories as members.

The OIE has three main aims, to: (i) promote and coordinate research on contagious diseases of livestock; (ii) collect and disseminate information on epizootic diseases; and (iii) harmonise regulations governing international trade in animals and animal products.

The OIE Code

The OIE *Code* is the *International animal health code: mammals, birds and bees* (OIE, 1997). It is updated annually as a reference document for state veterinary services and others involved in international animal trade. The *Code* is used as a basis for drafting veterinary regulations governing both the import and export of animals and animal products, and gives guidelines for disease control and certification. Using the *Code* to harmonise trade requirements will facilitate trade by avoiding unjustified barriers.

The *Code* sets out definitions and basic principles of disease control measures. Much of the *Code* consists of chapters on the list A and list B diseases with which the OIE is concerned.

New status of the OIE Code

In the past the OIE *Code* has been available for OIE member (and other) countries to use, but there was no obligation for regulatory officials to follow its procedures. From 1995, as a result of the Uruguay round of multilateral talks which established the World Trade Organization (WTO), a new status was given to the OIE and its documented procedures.

Following the OIE *Code* is no longer simply an option for WTO members:

Harmonisation

WTO members must base their sanitary measures on international standards, guidelines or recommendations where they exist, unless the agreement specifically allows otherwise. The SPS agreement requires this to harmonise sanitary measures on as wide a basis as possible.

Deviation from the Code

WTO members may introduce or maintain sanitary measures which result in a higher level of sanitary protection than would be achieved by following the relevant international standards, guidelines or recommendations, only: (i) if this is scientifically justified; or (ii) to achieve a level of sanitary protection which is determined to be appropriate by a formal risk analysis.

Even so, these sanitary measures which deliver a higher level of sanitary protection must be consistent with the remainder of the SPS agreement.

Coverage of honey bee diseases

The five diseases of honey bees that are covered by the OIE *Code* at present are acariasis (infestation with the honey bees tracheal mite *Acarapis woodi*), American foulbrood (*Paenibacillus larvae larvae*), European foulbrood (*Melissococcus pluton*), nosemosis (*Nosema apis*) and varroosis (*Varroa jacobsoni*).

The range of honey bees diseases covered by the OIE *Code*, and the content of relevant sections of that document, are currently under revision by the OIE.

References

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