

The role of the World Trade Organization and the 'three sisters' (the World Organisation for Animal Health, the International Plant Protection Convention and the Codex Alimentarius Commission) in the control of invasive alien species and the preservation of biodiversity

S. Kahn & W. Pelgrim

World Organisation for Animal Health (OIE), 12, Rue de Prony, 75017 Paris, France

Summary

The missions of the World Organisation for Animal Health (OIE) include the design of surveillance and control methods for infectious transboundary animal diseases (including zoonoses), the provision of guarantees concerning animal health and animal production food safety, and the setting of standards for, and promotion of, animal welfare. The OIE role in setting standards for the sanitary safety of international trade in animals and animal products is formally recognised in the World Trade Organization (WTO) Agreement on the Application of Sanitary and Phytosanitary Measures (the SPS Agreement). While the primary focus of the OIE is on animal diseases and zoonoses, the OIE has also been working within the WTO framework to examine possible contributions the organisation can make to achieving the goals of the Convention on Biological Diversity, particularly to preventing the global spread of invasive alien species (IAS). However, at the present time, setting standards for invasive species (other than those connected to the cause and distribution of diseases listed by the OIE) is outside the OIE mandate. Any future expansion of the OIE mandate would need to be decided by its Members and resources (expertise and financial contributions) for an extended standard-setting work programme secured.

The other international standard-setting organisations referenced by the SPS Agreement are the International Plant Protection Convention (IPPC) and the Codex Alimentarius Commission (CAC). The IPPC mandate and work programme address IAS and the protection of biodiversity. The CAC is not involved in this field.

Keywords

Biodiversity – Codex Alimentarius Commission – Convention on Biological Diversity – International Plant Protection Convention – Invasive alien species – World Organisation for Animal Health – World Trade Organization.

Introduction

The World Trade Organization (WTO) Agreement on the Application of Sanitary and Phytosanitary Measures (the SPS Agreement) came into force with the establishment of

the World Trade Organization on 1 January 1995. The SPS Agreement concerns the application of trade measures for the protection of human, animal and plant health. It identifies the three standard-setting organisations (also referred to as 'the three sisters') that are responsible for the

elaboration of relevant standards, i.e. the World Organisation for Animal Health (OIE), the International Plant Protection Convention (IPPC) and the Codex Alimentarius Commission (CAC). The SPS Agreement recognises the standards, guidelines and recommendations of these international bodies with respect to animal health (including zoonoses), plant health and food safety, respectively. The role of the 'three sisters' is clearly defined in Annex A of the Agreement (17).

The mandate given to the OIE by its Members focuses on animal health and the control of animal diseases. The mandate of the IPPC covers diseases and pests of plants, including plants that are invasive alien species (IAS) or weeds. The CAC deals with food safety, as well as other issues relating to consumer protection, including food labelling, that are not within the scope of the SPS Agreement.

This paper describes the role and responsibilities of the three sisters and of the WTO SPS Committee in relation to the control of IAS and the preservation of biodiversity.

World Trade Organization Sanitary and Phytosanitary Agreement

In the SPS Agreement, sanitary and phytosanitary measures are defined as, 'any measure applied to protect animal or plant life or health within the territory of the Member from risks arising from the entry, establishment or spread of pests, diseases, disease-carrying organisms or disease-causing organisms', or 'any measure applied to prevent or limit other damage within the territory of the Member from the entry, establishment or spread of pests'. According to the definitions in the SPS Agreement, 'animal' includes fish and wild fauna, 'plant' includes forests and wild flora, and 'pests' includes weeds. Therefore, while the terms 'invasive alien species' and 'biodiversity' are not mentioned in the Agreement, the definitions of SPS Measures are very broad and could be read as including measures to control or prevent the introduction of IAS and to preserve biodiversity.

In this context, the mandate of the OIE in relation to IAS and the preservation of biodiversity would appear to be limited to animal health (and zoonotic diseases), but the IPPC would seem to have a broader role in environmental protection and the preservation of biodiversity.

In the trade dispute regarding the European Union (EU) moratorium on the approval of biotechnology

products, the EU argued that a major objective of its approval procedures for biotechnology products was to protect biodiversity. The WTO dispute settlement panel ruled that the protection of biodiversity as detailed in the EU legislation was in essence the protection of the life and health of flora and fauna, albeit at times microscopic, from risks relating to the introduction of genetically modified organisms. The panel therefore ruled that measures with these objectives were within the scope of the SPS Agreement (9, 18).

Role of the World Organisation for Animal Health

The OIE is an intergovernmental organisation that was founded in 1924 and now has 176 Members (1). At the direction of Members, the original OIE mandate ('to prevent animal diseases from spreading internationally') has been extended to address important animal health-related issues, including the role of wildlife in the spread of disease, the management of food safety risks arising on-farm from animals, diseases at the human/animal interface and the establishment of international animal welfare standards (11).

Invasive alien species

The OIE standards address international trade in terrestrial and aquatic animals and their products (15, 16). Over 100 animal diseases are listed and are the subject of OIE standards, guidelines and recommendations. The criteria for listing include: the scope for the disease to cause significant problems in animals and/or human populations; its capacity for international spread via the movement of animals and animal products; and the global distribution of the disease. The OIE classification does not specifically take into account whether the causative pathogens of these diseases are considered to be 'alien' or 'invasive' in the sense that these terms are employed by the Convention on Biological Diversity (CBD) (3).

Depending on the definitions adopted by the CBD, the pathogens causing some OIE listed diseases may be considered as IAS. In a recent CBD publication, the pathogenic organisms causing two OIE listed diseases (avian influenza and rinderpest) are referred to as IAS (4).

While the OIE does not have a specific mandate with respect to international trade standards for IAS, or for the protection of biodiversity, through some of its activities the OIE contributes, directly or indirectly, to the control of IAS and to the preservation of biodiversity.

In addition to establishing international trade standards, the OIE provides guidance on related topics, including surveillance and control methods for animal diseases (including zoonoses) and the provision of guarantees for animal health and animal production food safety.

In recommending disease control measures, the OIE may advocate the culling of infected and at-risk animals, as it is one of the most important measures for the control of highly contagious diseases. However, where feasible, the OIE recommends the use of other measures, such as vaccination and monitoring, and the application of strategies such as zoning and compartmentalisation for disease control purposes. Use of these strategies can help to reduce the number of animals killed for the purposes of disease control. These strategies can therefore be beneficial during disease outbreaks, as they safeguard animal populations of high genetic merit, including rare and local breeds (including wildlife), and thus contribute to the preservation of biodiversity.

International agreements

Through its formal agreements with organisations that contribute to the control of IAS and the preservation of biodiversity, the OIE can also contribute to the objectives of the CBD.

Several international organisations working in fields relevant to international trade and the international movement of animals and animal products have formal agreements with the OIE. They include:

- CAB International (10)
- the International Air Transport Association (IATA) (13)
- the World Customs Organization (WCO) (14)
- the International Council for the Exploration of the Sea (ICES) (12).

The International Council for the Exploration of the Sea has developed a Code of Practice on Introductions and Transfers of Marine Organisms (5). The Code applies to all introductions and transfers of marine organisms that may present risks to target and non-target species (including the introduction of disease agents). The aim is to protect indigenous as well as previously intentionally introduced species and to meet international obligations. The OIE *Aquatic Animal Health Code* (15) and the ICES Code contain cross references. However, for the moment, the references in the OIE *Aquatic Code* are limited to the issues falling within the OIE mandate.

Role of the International Plant Protection Convention

The IPPC is an international treaty relating to plant health (6). As at 27 July 2009, 173 governments are signatories to the treaty.

Just as the OIE aims to prevent and control the international spread of animal diseases, the IPPC objective is to control and prevent the international spread of pests of plants. In the IPPC context, any organisms that are harmful to other plants are considered pests (this includes plants as pests, IAS or weeds, and other organisms such as insects and bacteria). The scope of the Convention includes the protection from pests of wild as well as cultivated plants. The IPPC therefore develops standards to prevent the introduction, spread and establishment of plants that could become pests. Because the mandate of the IPPC covers the protection of all plant species, its standard-setting role in regard to the protection of the environment and biodiversity is clearly established.

The IPPC cooperates with the CBD on matters related to IAS to ensure that areas of common interest are adequately covered. In 2003, the IPPC Secretariat and the CBD Secretariat signed a Memorandum of Cooperation to promote synergy and ensure effective cooperation in joint activities, and representatives of the two Secretariats meet regularly to review and update their joint work programme.

The governing body of the IPPC, the Commission on Phytosanitary Measures (CPM), has adopted several International Standards for Phytosanitary Measures (ISPMs) that help Members harmonise their management of IAS. In 2009, the IPPC adopted an appendix to ISPM No. 5 (*Glossary of Phytosanitary Terms*) to clarify the relationship between phytosanitary and CBD terminology, entitled *Terminology of the Convention on Biological Diversity in relation to the glossary of phytosanitary terms* (8). In addition, the CPM has also adopted several supplements to ISPM No. 11 (*Pest risk analysis for quarantine pests, including analysis of environmental risks and living modified organisms*) to include guidance on how to consider environmental risks when conducting pest risk analysis (7). The CPM is also currently developing an additional supplement to provide similar guidance for intentionally imported plants that have the potential to become pests.

Codex Alimentarius Commission

The CAC was created in 1963 by FAO and the World Health Organization (WHO) with the objective

of developing food standards, guidelines and related texts, such as codes of practice, under the Joint FAO/WHO Food Standards Programme. The main purposes of this Programme are: protecting consumer health, ensuring fair trading practices for food, and promoting coordination of all food standards work undertaken by international governmental and non-governmental organisations (2).

Although some countries have successfully eliminated certain food-borne pathogens from their territory or food production units, the concept of disease-free or pest-free areas is not well established in the food safety domain. For this reason, at this moment, the CAC does not seem to have a clear mandate in regard to the control of IAS and the preservation of biodiversity.

Future developments in the prevention and control of invasive alien species

Role of the Sanitary and Phytosanitary Agreement

The WTO definition of sanitary and phytosanitary measures is broad, with the key references being 'to protect animal and plant life' or the 'territory of a Member' and 'against the establishment or spread of pests'. 'Animal and plant life' are defined as including wild flora and fauna, as well as fish and forests, and 'pests' includes weeds. Thus a broad interpretation could support the objectives of preventing the spread of IAS and preserving biodiversity.

The current mandate of the OIE as an international standard-setting body under the SPS Agreement relates to animal health (including zoonoses). The OIE could, therefore, be called upon to play a more direct role in regard to IAS and biodiversity in matters relating to the protection of animal health (including wildlife or micro-fauna).

Role of the World Organisation for Animal Health

To date, the OIE has not undertaken to set standards for the containment or exclusion of IAS except for those pathogens that cause diseases listed by the OIE. In addition, the OIE mandate does not specifically address the impact that a species may have on the biodiversity of an importing country.

According to the organic rules of the OIE, any expansion of its mandate would need to be formally adopted by the World Assembly of National Delegates, which meets annually in May. At the 78th General Session in May 2011 the OIE adopted a new Strategic Plan for 2011-2016. The priorities identified in this 5th OIE Strategic Plan include animal production food safety; the role of wildlife in the spread of animal diseases; animal welfare; biotechnology; and emerging diseases. Environmental issues are identified in the 5th Strategic Plan; however, this is principally within the inter-organisational strategic framework for reducing risks of infectious diseases at the human-animal-ecosystems interface and also with reference to the contribution of animal production practices to climate change.

As an intergovernmental organisation that depends on the contributions of Members for its operating budget, the financial implications of extending the OIE mandate to include IAS and biodiversity would need to be considered carefully. Any expansion of the OIE's mandate would require funding, which implies an increase in Members' contributions, unless other sustainable sources could be identified.

Conclusions

In conclusion, while the primary focus of the OIE is on the prevention and control of listed animal diseases, including zoonoses, it has also been working within the WTO framework to examine the contributions the OIE could make to achieve the goals of the CBD.

If OIE Members considered that the OIE should take a more direct role (for example, in setting standards to prevent the global spread of IAS), the mandate of the OIE would need to be extended and sources of expertise and financial contributions identified to support a new standard-setting work programme.



Le rôle de l'Organisation mondiale du commerce et des « trois organisations sœurs » (l'Organisation mondiale de la santé animale, la Convention internationale pour la protection des végétaux et la Commission du Codex Alimentarius) dans le contrôle des espèces exotiques envahissantes et la préservation de la biodiversité

S. Kahn & W. Pelgrim

Résumé

Les principales missions de l'Organisation mondiale de la santé animale (OIE) sont la conception de méthodes de surveillance et de lutte contre les maladies animales infectieuses transfrontalières (y compris les zoonoses), la mise en place de mesures visant à garantir la santé animale et la sécurité sanitaire des aliments d'origine animale en phase de production, et l'élaboration de normes dans le domaine du bien-être animal et de sa promotion. L'Accord sur l'Application des mesures sanitaires et phytosanitaires (Accord SPS) de l'Organisation mondiale du commerce (OMC) a officiellement reconnu l'OIE en tant qu'organisation internationale de référence chargée d'élaborer les normes relatives à la sécurité sanitaire des échanges internationaux d'animaux et de produits d'origine animale. Si l'OIE a pour principal mandat de lutter contre les maladies animales et les zoonoses, elle a également commencé à envisager de nouvelles possibilités d'action, toujours dans le cadre de l'OMC, afin de réaliser les objectifs de la Convention sur la diversité biologique, en particulier pour ce qui concerne la prévention des invasions d'espèces allochtones dans le monde. Toutefois, l'élaboration de normes relatives aux espèces envahissantes (autres que les espèces directement responsables de l'émergence et de la propagation des maladies listées par l'OIE) ne relève pas, pour l'instant, du mandat de l'OIE. Un éventuel élargissement de ce mandat nécessiterait une décision préalable des Membres de l'Organisation en ce sens, ainsi que la mobilisation de ressources (financements et expertise) suffisantes pour mener à bien le processus normatif.

Les deux autres organisations internationales ayant des compétences normatives reconnues par l'Accord SPS sont la Convention internationale pour la protection des végétaux (CIPV) et la Commission du Codex Alimentarius (CCA). Le problème des espèces allochtones envahissantes et la protection de la biodiversité sont couverts par le mandat de la CIPV et font l'objet de son programme de travail. En revanche, ces thèmes ne relèvent pas des compétences de la CCA.

Mots-clés

Biodiversité – Commission du Codex Alimentarius – Convention internationale pour la protection des végétaux – Convention sur la diversité biologique – Espèce allochtone envahissante – Organisation mondiale de la santé animale – Organisation mondiale du commerce.



Funciones de la Organización Mundial del Comercio y de las 'tres hermanas' (Organización Mundial de Sanidad Animal, Convención Internacional de Protección Fitosanitaria y Comisión del Codex Alimentarius) en el control de las especies foráneas invasoras y la preservación de la diversidad biológica

S. Kahn & W. Pelgrim

Resumen

Entre las misiones de la Organización Mundial de Sanidad Animal (OIE) figuran la de concebir métodos de vigilancia y control de las enfermedades animales infecciosas transfronterizas (incluyendo las zoonosis), la de establecer garantías en materia de sanidad animal y seguridad sanitaria de los alimentos derivados de la producción animal y la de promover el bienestar de los animales y definir normas al respecto. En el Acuerdo sobre la Aplicación de Medidas Sanitarias y Fitosanitarias (Acuerdo MSF) de la Organización Mundial del Comercio (OMC) se atribuye oficialmente a la OIE la función normativa en materia de seguridad sanitaria del comercio internacional de animales y sus derivados. Aunque la labor de la OIE se centra primordialmente en las enfermedades animales y zoonosis, la Organización también viene estudiando, dentro del marco que configura la OMC, la forma en que puede contribuir al logro de los objetivos del Convenio sobre la Diversidad Biológica y, en especial, a la prevención de la propagación mundial de especies foráneas invasoras. En la actualidad, sin embargo, el mandato de la OIE no incluye la potestad de dictar normas sobre especies invasoras (excepto las relacionadas con el origen y la propagación de enfermedades incluidas en la lista de la OIE). Toda ampliación de su mandato exigiría que así lo decidieran sus Miembros y que se le proporcionaran los recursos necesarios (personal especializado y contribuciones financieras) para asumir un programa de trabajo normativo más amplio. Los otros organismos normativos especificados en el Acuerdo MSF son la Convención Internacional de Protección Fitosanitaria (CIPF) y la Comisión del Codex Alimentarius (CCA). Dentro del mandato y el programa de trabajo de la CIPF figuran las cuestiones de las especies foráneas invasoras, y de la protección de la diversidad biológica, temas de los que no se ocupa la CCA.

Palabras clave

Comisión del Codex Alimentarius – Convención Internacional de Protección Fitosanitaria – Convenio sobre la Diversidad Biológica – Diversidad biológica – Especie foránea invasora – Organización Mundial del Comercio – Organización Mundial de Sanidad Animal.



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