Ensuring safe international trade: how are the roles and responsibilities evolving and what will the situation be in ten years' time?

G.K. Brückner

1 Scholtz Street, Schoongezicht 30, Somerset West, 7130, South Africa

Summary

The roles of the international standard-setting bodies that are mandated to facilitate safe trade, such as the World Organisation for Animal Health (OIE), the Codex Alimentarius Commission, the International Plant Protection Convention and the World Trade Organization, are well documented, as are the roles of the international organisations responsible for global health issues: the OIE, the World Health Organization and the Food and Agriculture Organization of the United Nations. However, developments in international trade, such as accelerating globalisation and the frequent emergence and re-emergence of diseases affecting both humans and animals, have brought new challenges and the need to reconsider the future roles of such organisations. New participants and new demands have also emerged to challenge these mandates, leading to potential areas of conflict. The need for countries to establish themselves as new trade partners, or to strengthen their positions while still maintaining safe trade, poses a challenge to standard-setting organisations, which must meet these demands while still remaining sensitive to the needs of developing countries. In this paper, the author describes and discusses some of these challenges and suggests how international organisations could evolve to confront such issues.

Keywords

Emerging diseases — Globalisation — International organisation — Private standard — Safe trade — SPS Agreement.

Introduction

Ensuring the safety of international trade in animals and animal products is an important obligation of countries which are Members of the World Trade Organization (WTO). Under the WTO Agreement on the Application of Sanitary and Phytosanitary Measures (the 'SPS Agreement') (21), the WTO is expected to apply the World Organisation of Animal Health standards on animal health to ensure safe trade in animals and their products, the Codex Alimentarius Commission ('Codex') standards for food safety, and the International Plant Protection Convention (IPPC) standards on plant health (1, 2, 11, 12). After the signing of the SPS Agreement in 1995, it was generally assumed that the outcome of any favourable bilateral trade negotiation would be the agreement by the importing country to accept

the guarantees provided by the exporting country's with international standards. was thus expected that the two main participants in this ideal scenario would be the importing country, acting on behalf of domestic importers, and the exporting country, acting on behalf of its own producers. Supporting participants would be the international standard-setting organisation (the OIE), providing the standards that give the animal health guarantees necessary to meet the appropriate level of protection of the importing country and the WTO and providing the framework of the SPS Agreement. In this ideal scenario, the OIE's Terrestrial Animal Health Code and Aquatic Animal Health Code (the Codes) and the SPS Agreement are regarded as important trade-facilitating tools that should be accepted by the participating countries as sufficient for successfully concluding and implementing a trade negotiation (1, 2, 17, 21).

However, since the SPS Agreement came into force, it has become increasingly evident that the negotiation of a successful agreement on trade in animals or animal products is not just a simple matter of two countries accepting the recommendations of the Codes (21). It is now apparent that participants in bilateral trade negotiations are not necessarily restricted to considering just the prescripts of the WTO and the international standardsetting organisations. Globalisation has inevitably defined the framework for international trade and the manner in which key participants react to its challenges. The changes brought about by globalisation will, in many ways, determine the evolution of the future roles of the parties working to ensure safe trade and the practical ways in which trade issues will be played out by the key stakeholders in both the public and private sectors.

The challenges to international standard-setting organisations in ensuring safe trade

The apparent ease with which important pathogens have spread internationally has eroded the ability of national governments alone to deal with these threats (3, 10, 11). It is no longer unusual for both developed and developing countries to request assistance from international organisations to deal with these problems. The international community in general seems to accept that action programmes must take a global or at least a regional approach, as opposed to the more traditional national approach, and preventive and control strategies must be well integrated between public health and animal health authorities (11). It is also considered by some that a strictly national public and animal health policy, without the assistance of international organisations, has become inadequate to deal with the threats posed by globalisation (3, 12). According to Fidler (3), globalisation, defined as a process in which markets, laws and politics are denationalised, in the sense of interlacing peoples and individuals for the common good, is eroding traditional distinctions between domestic and foreign affairs. In a globalised world, governments no longer have control over the economic forces at work within their countries and are under increased pressure to manage the threats posed by globalisation (3, 4). These threats, and the challenges they present to governments and international organisations, cover a wide spectrum and include:

- the introduction of animal diseases
- reviewing existing standards for trade
- coping with new kinds of non-tariff barriers

- maintaining the scientific rationale for animal health measures against political pressures
- maintaining a balance between national and international requirements.

The OIE, for example, has accepted the challenge posed by emerging and re-emerging diseases and changes in the epidemiology and occurrence of animal diseases, attributable to such factors as globalisation and climatic and environmental changes (8, 9, 10). In accepting these challenges, the OIE, alongside the Food and Agriculture Organization of the United Nations (FAO) and World Health Organization (WHO), acknowledges the difficulties experienced by many countries in responding to them in an effective and timely manner (11, 12, 18). In facing these new issues, it is likely that OIE Member Countries will demand that provision be made in the Codes for appropriate mitigation measures to counteract the increased risk to safe trade posed by globalisation (1, 2, 12, 14). The problems arising from globalisation have led to a shift in the international standard-setting model or paradigm. The historical emphasis on a country or zone being free from disease as a basis for safe trade is still an important concept in trade facilitation, despite not being able to offer absolute guarantees of safety when trading in animals and animal products (11). However, while recognising that 'zero risk' is unattainable, we are now seeing the emergence of a new standard-setting paradigm, with a move towards a risk-based, scientific and regionalised approach. In this risk-based approach, categorising the status of a country or zone is based on an assessment of the overall level of risk present in that country, zone or animal population, rather than merely on whether a disease has been reported or not. In this new model, trade recommendations are based on the relative risk posed by the commodity under consideration (11).

The OIE has also recognised that the ability of its Members to successfully deal with these threats is also a test of their ability to ensure the safety of animals and commodities offered for trade. To assist those Members which need to improve their ability to cope with such perceived threats, the OIE has initiated a process to evaluate the performance of the Veterinary Services of countries and to identify what they need to be able to comply with OIE standards. This process, known as the evaluation of performance of Veterinary Services (or 'PVS evaluation'), applies a specific methodology in which trained OIE experts visit countries wishing to be evaluated (19). The focus of the evaluation is on assessing the performance of the country within the context of specific vital components of veterinary service delivery. These components include human, physical and financial resources, technical authority and capability, interaction with stakeholders, and access to markets. An initial PVS evaluation is ideally followed by either a second evaluation or a more detailed gap analysis to assess the

financial and other resources needed to advance in the required competencies of each component. Countries are also assisted to improve their diagnostic capabilities and to review and update national legislation to enable them to deal more effectively with emergencies (2, 19).

The challenge facing countries in ensuring safe trade in animals and animal commodities is not, however, restricted to animal health considerations alone. The occurrence and spread of animal diseases with a zoonotic potential has further challenged both national veterinary authorities and the international standardsetting organisations, which must develop standards for certification that will satisfy both animal and human health concerns. This twofold problem has been exemplified, not only by outbreaks of animal diseases posing a genuine threat to animal and human health, such as bovine spongiform encephalopathy (BSE) and highly pathogenic avian influenza (HPAI), but also by epidemics of animal diseases that do not pose a threat to human health, such as recent outbreaks of H1N1 in pigs and even outbreaks of foot and mouth disease. In the case of the outbreaks of H1N1 in pigs in 2009, the OIE had to issue a strong public statement through its Director General to ensure that trade in commodities was not disrupted by unfounded public concerns about the safety of pig meat (15).

Increased global concern about trade in commodities which might pose a threat to human health has prompted the international standard-setting organisations not only to formulate standards which will ensure safe trade, but also to clarify their respective roles and responsibilities and to remain entirely scientific in setting such standards. Organisations other than the OIE have also become participants in ensuring safe trade. Countries exporting animals and animal products have had to learn that animal health assurances, as reflected in the standards of the Codes, are not always the only assurances demanded by importing countries. In addition to the international standards of the OIE, they must also comply with those prescribed in the Codex Alimentarius, to provide importing countries with assurances on the processing and packaging of products of animal origin. Furthermore, WHO, through its awareness campaigns on zoonotic diseases such as HPAI, BSE and H1N1 influenza, has raised consumer consciousness worldwide of the need for safe food and safe trade, and the important link between the occurrence of diseases in animals and the potential threat to humans. The sensitive nature of the human-animal health interface has been further amplified in the continuing international discussion of the 'One World, One Health' concept. The three major international organisations, the OIE, WHO and FAO, have had to take clear positions in this debate, to demonstrate their mandate and roles in ensuring human health, animal health and safe trade (18).

Several issues unrelated to animal disease surface from time to time within the WTO environment and eventually find their way onto the agendas of meetings between the OIE, FAO and WHO. Examples include the insistence of importing countries that exporters comply with additional guarantees related to animal welfare, organic food, antimicrobial residues, human health, food quality and food safety measures. Additional requirements such as these often test the principle of Article 2 of the SPS Agreement, which requires WTO Members to apply disease control measures only to the extent necessary to protect human, animal or plant life or health, and to base such requirements on scientific principles.

One such test has been the perception, especially from developing countries, that private industry standards threaten international standards and are likely to lead to trade restrictions (13). In contrast to public international standards, private standards have been developed in response to consumer preferences and concerns. They have greatly increased over the past decade and may, in some instances, conflict with the official public standards (13). According to Wolff (13), private standards address a mixture of SPS and other objectives, including social and environmental concerns that are not related to food safety or the protection of plant or animal health. These private standards may have no scientific justification, although they may address consumer perceptions of what is safe. Furthermore, private standards may reflect production practices in certain developed countries but are possibly unsuitable for producers in developing countries.

These concerns have been recognised by the SPS Committee of the WTO, the OIE and Codex, and debated in depth (13). According to Robach (7), over the past two decades many consumers have become more concerned about food safety and other aspects of the food which they consume. These concerns have driven retailers and their suppliers within the food industry, along with many governments, to react in ways that are not always supported by scientific evidence. The reactions of retailers and the food industry have challenged the international standard-setting organisations and the WTO to re-evaluate their approach to setting minimum standards for safe trade, while still ensuring that unjustified trade restrictions are not created. Countries entering into trade negotiations are in many instances now obliged to take note of requirements other than those of the OIE and Codex and the obligations of the SPS Agreement. Major participants in the setting of private standards include those organisations prescribing requirements for good agricultural practices (GAP), such as GlobalGAP (formerly EUREGAP), which has more than 100 members.

This apparent conflict between public and private standards should not be considered permanent but, nevertheless, it presents the OIE, Codex and IPPC with the

challenge of harmonizing their standards with those of such private organisations without sacrificing the overall objective of facilitating trade, by prescribing the minimum disease control measures necessary to protect human, animal and plant health (7, 13).

Ensuring safe trade: future perspectives

The certification for safe trade in animals and animal products is guided by a triangle of partners; namely, the OIE (for setting animal health standards), the WTO (for providing the 'rules of the game' for fair trade), and the importing/exporting countries (for respectively requesting and providing sanitary guarantees). Each of these partners is under continuing pressure to review its approaches for facilitating safe trade. This may be internally driven, through self-evaluation, or externally and client driven. There is sufficient evidence in the reports of the OIE, the Codex, the WTO SPS Committee, the Committee on Technical Barriers to the Trade and the Council for Trade-Related Aspects of Intellectual Property Rights to show that continuous re-examination of existing approaches is indeed taking place. However, in the context of safe trade, an important question that should be asked is: to what extent do continuous review processes provide an acceptable balance between trade preferences and animal or human health concerns (5)? Similarly, while it is accepted that adequate trade restrictions are needed to protect the lives and health of people, animals and plants, the need sometimes to apply disease control measures in the absence of scientific evidence or an international standard, as allowed for by the precautionary principle in Article 5.7 of the SPS Agreement, is becoming more inviting, and this presents a further challenge (5, 21). While the facilitating role of the 'triangle of partners' is generally accepted, the message conveyed through the substantial increase in bilateral and regional trade agreements should not be ignored. Such trade agreements are increasingly important. From 1990 to 2007, the number of such agreements notified to the WTO increased from 20 to 159. By the end of 2009, more than 30% of world trade was governed by over 250 regional and bilateral trade agreements (5). This suggests that countries are seeking more accommodating ways to negotiate trade outside the traditional 'triangle of partners' or that they are determining their own conditions for trade, which might be either more or less stringent than what would otherwise be required.

It could be argued that the organisations currently mandated to govern safe trade, the three standard-setting organisations (OIE, Codex and IPPC) and the WTO, can continue to claim to be the only organisations with a role

in international trade negotiations. The OIE, Codex, IPPC and the WTO, as well as the trading countries themselves, have already begun to acknowledge that other participants have 'joined the team'. Safe trade has become a complicated matter, and a trade-off between purely scientific rationale and standards and political concerns and preferences. An increasing competitiveness appears to be emerging, with new participants, many of them developing countries which were previously excluded from the lucrative international trade scene.

The need for closer collaboration, and the importance of confirming their respective roles as the primary participants in addressing global health concerns, was publicly acknowledged by the OIE, FAO and WHO in a recent joint statement (18). In this statement, the need for joint efforts at regional and national levels was accepted, with the aim of obtaining deeper and sustainable political support for the integrated prevention of high-impact diseases of medical and veterinary importance. These three organisations also confirmed the need for the joint development of effective interventions to ensure coherence of action, as well as to raise awareness among the general public and policy-makers of the risks of, and appropriate actions needed to minimise, human infection by pathogens of animal origin. Prevention of the emergence and cross-border spread of human and animal diseases was acknowledged as a global public good, with benefits that extend to all countries, people and generations. The tripartite partners encouraged international solidarity in the control of human and animal diseases, while providing international support to Member Countries requesting assistance with disease control programmes (18).

While this public announcement of a joint commitment is commendable, the changing demands of international trade require a strong voice to ensure that safe trade concerns are addressed on the agendas of trade negotiations and that these matters will not be compromised in favour of other trade considerations. It is debatable whether the OIE can be expected to become more pro-active in standard-setting to mitigate risks for as yet unknown diseases, since the emergence of diseases threatening human or animal health remains unpredictable. It is, however, also important that the three international standard-setting bodies recognised by the WTO continue to apply scientific and risk-based principles when confronted by perceived but unconfirmed health threats, so as to not restrict trade unduly while seeking scientific clarification. The OIE currently 47 agreements with a variety of organisations, of which the majority are directly or indirectly trade related (16). It would be to the advantage of the OIE in strengthening its role in the international trade arena to continue to clearly demonstrate its commitment to adhering to scientific rationale and justification on issues related to safe trade,

especially with those organisations with which conflict could potentially arise.

In recent years, the OIE has been under pressure to widen the scope of its standards to cover not just terrestrial and aquatic animal health but also issues such as animal welfare. Most of these issues have an impact on safe trade. There is no reason to believe that the pressure to develop such standards on issues not related to animal health will become less. The future challenge for the OIE will be to maintain the balance, and a rational approach, between those issues which are related to disease and those which are not, and to ensure that only those that pose a genuine risk to the sanitary safety of trade be recommended as requiring risk mitigation measures.

The current OIE policy of encouraging its Members to strive for freedom from disease as a trade-facilitating mechanism is commendable and will continue for the foreseeable future. However, judging from the list of countries currently recognised as officially free from tradesensitive diseases, such as foot and mouth disease, the majority are wealthier nations that can afford the cost of achieving and maintaining disease freedom (20). To address the gap between developed and developing countries, the OIE's standards have been broadened to accommodate the establishment of 'compartments' that are free from disease and to identify commodities that are safe to trade, regardless of the disease status of the country (17). Such developments will especially benefit developing countries, which, for various reasons, cannot afford to sustain freedom from disease for either the entire country or for specific zones. Linked to this is the PVS initiative of the OIE, which aims to enhance the delivery of Veterinary Services in developing countries, making them more attractive trade partners. While it is hoped that these initiatives will increase access to international markets for developing countries, and provide a more cost-effective way of meeting standards for safe trade, there is no guarantee that this will be the case. It can be expected that, while more countries may be able to provide sanitary guarantees for safe trade, they will have to overcome many more obstacles in establishing a place in the market, competing with those countries that have already established their place and which will also benefit from a commodity risk-based approach (4, 6). Promotion of the recognition of disease freedom, whether of countries,

zones or compartments, and the guarantees that such freedom will provide for all commodities, without discrimination or unnecessary additional restrictive measures, will thus become an important responsibility of the OIE, particularly in collaboration with WHO and FAO

Conclusion

While the responsibilities of the main international organisations, such as the OIE, Codex, IPPC and WTO in facilitating safe trade, and the OIE, WHO and FAO in promoting global disease control, are reasonably well defined, changes in the international scene have brought new challenges and a need to reconsider the future evolution of the missions of these organisations. In the past, it was probably easier for these organisations to function in parallel with each other, while maintaining clearly demarcated mandates. Issues such as those emerging in the interface between humans, animals and ecosystems, trade globalisation and the rapid and unprecedented global spread of diseases have all contributed to softening the borders between these organisations. Recent disease outbreaks, such as the H5N1 pandemic, have highlighted the many areas of mutual concern that require the attention of more than one international organisation. The number of private organisations becoming involved in safe trade issues has also increased. Linked to this is the reality that more than two-thirds of the Members of these international organisations are developing countries that do not have the ability either to negotiate or compete with the established participants in international trade. These countries will, for the foreseeable future, remain dependent on international organisations to assist them in achieving their trade needs. In recognising the fast-changing international trade environment, and the challenge that this poses to international organisations, it is equally important that the international organisations should continue to strengthen their mutual roles to act as the arbiters between purely trade-centred needs and the requirement to ensure safe trade in animals and animal products.

Assurer la sécurité des échanges internationaux : comment les rôles et les responsabilités évoluent-ils, et quelle sera la situation dans dix ans ?

G.K. Brückner

Résumé

Les rôles respectifs des organismes normatifs internationaux ayant pour mandat de faciliter l'innocuité des échanges internationaux, tels que l'Organisation mondiale de la santé animale (OIE), la Commission du Codex Alimentarius, la Convention internationale pour la protection des végétaux et l'Organisation mondiale du commerce sont bien connus, de même que ceux des organisations internationales chargées des questions sanitaires au niveau mondial, à savoir, l'OIE, l'Organisation mondiale de la santé et l'Organisation des Nations Unies pour l'alimentation et l'agriculture. Toutefois, les évolutions actuelles du commerce international telles que la mondialisation croissante et l'émergence ou réémergence de maladies affectant l'homme et l'animal soulèvent de nouveaux défis et imposent à ces organisations de reconsidérer l'évolution future de leurs rôles. De nouvelles exigences et de nouveaux acteurs sont apparus, remettant en cause les mandats de ces organisations, ce qui donne lieu à des aires potentielles de conflit. La nécessité pour les pays de se positionner en tant que nouveaux partenaires commerciaux, ou de renforcer leurs parts de marché tout en préservant la sécurité des échanges pose une difficulté aux organisations normatives, qui doivent répondre à ces exigences sans pour autant ignorer les besoins des pays en développement. L'auteur décrit et examine ces défis et propose quelques perspectives d'évolutions afin que les organisations internationales puissent faire face à ces problèmes.

Mots-clés

Accord sur l'application des mesures sanitaires et phytosanitaires – Commerce sécurisé – Maladie émergente – Mondialisation – Norme privée – Organisation internationale.

Garantía de la seguridad del comercio internacional. ¿Cómo evolucionan las funciones y responsabilidades y cuál será la situación dentro de diez años?

G.K. Brückner

Resumen

Las funciones de organismos normativos internacionales que tienen el mandato de facilitar un comercio seguro, como la Organización Mundial de Sanidad Animal (OIE), la Comisión del Codex Alimentarius, la Convención Internacional de Protección Fitosanitaria o la Organización Mundial del Comercio (OMC), están

bien descritas, al igual que el papel de las organizaciones internacionales responsables de los temas de salud a escala mundial, que son la OIE, la Organización Mundial de la Salud (OMS) y la Organización de las Naciones Unidas para la Agricultura y la Alimentación (FAO). No obstante, los cambios que se vienen produciendo en el comercio internacional, como la creciente mundialización y la frecuente aparición y reaparición de enfermedades que afectan tanto a personas como a animales, han traído consigo nuevos problemas y la necesidad de replantearse las funciones que en el futuro habrán de desempeñar esas organizaciones. También han surgido nuevos interlocutores y nuevas demandas que ponen en entredicho esos mandatos y dan lugar a posibles áreas de conflicto. La necesidad de algunos países de asentarse como nuevos socios comerciales o de reforzar su posición. manteniendo a la vez la seguridad del comercio, plantea dificultades a los organismos normativos, que deben responder a esas demandas y al mismo tiempo seguir siendo sensibles a las necesidades de los países en desarrollo. El autor describe y examina algunas de esas dificultades y apunta el modo en que las organizaciones internacionales podrían evolucionar para hacer frente a todos estos problemas.

Palabras clave

Acuerdo MSF – Comercio seguro – Enfermedades emergentes – Mundialización – Normas privadas – Organizaciones internacionales.

References

- 1. Brückner G.K. (2004). Working towards compliance with international standards. *In* Veterinary institutions in the developing world: current status and future needs (C. de Haan, ed.). *Rev. sci. tech. Off. int. Epiz.*, **23** (1), 95-107.
- 2. Brückner G.K. (2009). The role of the World Organisation for Animal Health (OIE) to facilitate the international trade in animals and animal products. *Onderstepoort J. vet. Res.*, **76** (1), 141-146.
- 3. Fidler D.P. (1996). Globalisation, international law and emerging infectious diseases. *Emerg. infect. Dis.*, **2** (2), 77-84.
- 4. Heath S.E. (2006). Challenges and options for animal and public health services in the next two decades. *In* Biological disasters of animal origin. The role and preparedness of veterinary and public health services (M. Hugh-Jones, ed.). *Rev. sci. tech. Off. int. Epiz.*, **25** (1), 403-419.
- 5. Lee K., Sridhar D. & Patel M. (2009). Bridging the divide: global governance of trade and health. *Lancet*, **373** (9661), 416-422. E-pub.: 21 January 2009.

- Rich M. & Perry B.D. (2010). Whither commodity-based trade? NUPA. Working Paper No. 776. Norwegian Institute of International Affairs (NUPA), Oslo, 1-44.
- 7. Robach M. (2010). A private sector perspective on private standards some approaches that could help to reduce current and potential future conflicts between public and private standards. Technical item presented at the 78th World Organisation for Animal Health (OIE) General Session, 23-28 May, Paris. OIE, Paris. Available at: www.oie.int/fileadmin/Home/eng/Internationa_Standard_Setting/docs/pdf/A_78SG_9_.pdf (accessed on 25 November 2010).
- Rosenthal J. (2009). Climate change and the geographic distribution of infectious diseases. *EcoHealth*, 6 (4), 489-495.
 E-pub.: 25 May 2010.
- Seimenis A.M. (2008). The spread of zoonoses and other infectious diseases through the international trade of animals and animal products. Vet. ital., 44 (4), 591-599.
- Tatem A.J. (2009). The worldwide airline network and the dispersal of exotic species: 2007-2010. *Ecography*, 32 (1), 94-102.

11. Thiermann A. (2004). – Emerging diseases and implications for global trade. *In* Emerging zoonoses and pathogens of public health concern (L.J. King, ed.). *Rev. sci. tech. Off. int. Epiz.*, **23** (2), 701-708.

- 12. Vallat B., Pinto J. & Schudel A. (2006). International organisations and their role in helping to protect the worldwide community against natural and intentional biological disasters. *In* Biological disasters of animal origin. The role and preparedness of veterinary and public health services (M. Hugh-Jones, ed.). *Rev. sci. tech. Off. int. Epiz.*, **25** (1), 163-172.
- 13. Wolff C. & Scannell M. (2008). Implication of private standards in international trade of animals and animal products. Technical item presented at the 76th World Organisation for Animal Health (OIE) General Session, 25-30 May, Paris. OIE, Paris. Available at: www.oie.int/fileadmin/Home/eng/Internationa_Standard_Setting/docs/pdf/A_private_20standards.pdf (accessed on 25 October 2010).
- 14. World Organisation for Animal Health (OIE) (2007). Protecting the world from emerging diseases. Editorial (B. Vallat). *Bull. OIE*, **2**, 1-3. Available at: www.oie.int/fileadmin/Home/eng/Publications_%26_Documentation/docs/pdf/Bull_2007-2-ENG.pdf (accessed on 1 November 2010).
- 15. World Organisation for Animal Health (OIE) (2009). Press release by the Director General of the OIE: Pandemic (H1N1) 2009: the OIE reiterates its recommendations to animal health authorities worldwide. Available at: www.oie.int/en/for-the-media/press-releases/detail/article/pandemic-h1n1-2009-the-oie-reiterates-its-recommendations-to-animal-health-authorities-worldwide/ (accessed on 5 November 2010).
- 16. World Organisation for Animal Health (OIE) (2010). Cooperation agreements between the OIE and intergovernmental and other international non-governmental organisations. Available at: www.oie.int/en/about-us/keytexts/cooperation-agreements/ (accessed on 30 November 2010).

- 17. World Organisation for Animal Health (OIE) (2010). Terrestrial Animal Health Code, 19th Ed. OIE, Paris, 774 pp. Available at: www.oie.int/en/international-standardsetting/terrestrial-code/access-online/ (accessed on 28 October 2010).
- 18. World Organisation for Animal Health (OIE) (2010). The Food and Agriculture Organization of the United Nations/OIE/World Health Organization collaboration: sharing responsibilities and coordinating global activities to address health risks at the animal-human-ecosystems interfaces: a tripartite concept note. Available at: www.oie.int/fileadmin/Home/eng/Current_Scientific_Issues/docs/pdf/FINAL_CONCEPT_NOTE_Hanoi.pdf (accessed on 28 October 2010).
- 19. World Organisation for Animal Health (OIE) (2010). The OIE Tool for the Evaluation of Performance of Veterinary Services (OIE PVS Tool). Available at: www.oie.int/en/support-to-oie-members/pvs-evaluations/oie-pvs-tool/(accessed on 7 November 2010).
- 20. World Organisation for Animal Health (OIE) (2010). Animal health in the world: official diseases status. Available at: www.oie.int/en/animal-health-in-the-world/official-disease-status/ (accessed on 3 November 2010).
- 21. World Trade Organization (WTO) (2010). The Agreement on the Application of Sanitary and Phytosanitary Measures. WTO, Geneva. Available at: www.wto.org/english/tratop_ e/sps_e/spsagr_e.htm (accessed on 1 November 2010).