

Awareness and implementation of the regional animal welfare strategy for the Americas: a questionnaire

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Summary

The World Organisation for Animal Health (OIE) is the global standard-setting organisation for animal health and these standards are references for the World Trade Organization legal framework. In 2002, noting the relationship between animal health and welfare, the OIE accepted the mandate to develop animal welfare standards. These standards were subsequently adopted by Member Countries and have been included in the *Terrestrial Animal Health Code* and the *Aquatic Animal Health Code*. The implementation of the OIE standards by Member Countries is continually promoted. National OIE Delegates are encouraged to nominate National Focal Points for key topics, including animal welfare. In 2012, the OIE Regional Commission of the Americas adopted a Regional Animal Welfare Strategy (Regional Strategy) to promote a coordinated approach to the implementation of the OIE animal welfare standards by the 29 Member Countries in the region. In February 2015, the OIE Regional Representation for the Americas distributed a questionnaire to determine the level of awareness and implementation of the Regional Strategy. This paper

presents the results of the questionnaire. With a few exceptions, veterinary officials and stakeholders are only just becoming aware of the strategy and implementation is at an early stage. To promote the implementation of the Regional Strategy, it will be necessary to continue building capacity of the national Veterinary Services, strengthening public–private partnerships, modernising legislation and promoting veterinary involvement in animal welfare. Through the implementation of the Regional Strategy, the OIE will provide support to countries in establishing animal welfare standards, in line with government priorities and consumer concerns.

Keywords

Americas – Animal welfare – International standards – OIE – Questionnaire privilege – Veterinary Services.

Introduction

The World Organisation for Animal Health (OIE) first highlighted animal welfare as a priority in its third Strategic Plan (2001–2005). Recognising the important link between animal health and welfare, Member Countries of the OIE gave a mandate to the organisation to develop global animal welfare standards, guidelines and recommendations (1). Since 2005, the OIE has adopted a set of Guiding Principles and ten animal welfare standards for terrestrial animals, all of which have been included in the OIE *Terrestrial Animal Health Code* (the *Terrestrial Code*) (2). In addition, four standards for the welfare of farmed fish have been included in the *Aquatic Animal Health Code* (3).

The implementation of OIE standards presents challenges to Member Countries, particularly the less-developed countries, which comprise more than half of the total membership (180 Member Countries). As part of a global programme to help national OIE Delegates to meet the obligations of OIE membership, each Delegate is encouraged to nominate National Focal Points in seven key subject areas, one of which is animal welfare. National Focal Points are responsible for

assisting the national Delegate and, under his/her direction, liaising with the OIE on matters relating to their area of expertise.

The Americas is a diverse region, economically, socially and culturally. However, what many of the countries in the region have in common is that they are producers and exporters of livestock and livestock products and, as such, they are increasingly concerned to ensure that their national animal welfare standards meet the requirements of international markets (4). Uruguay, for example, exports 80% of the bovine and ovine meat it produces, and has adapted its meat production chain to incorporate international animal welfare standards (5).

In 2009, Uruguay and Chile established an OIE Collaborating Centre on Animal Welfare; Mexico joined in 2013. The primary goal of the joint Collaborating Centre on Animal Welfare and Livestock Production Systems, which acts as a reference centre on animal welfare matters, is to promote animal welfare research in the region (4).

The OIE region of Asia, the Far East and Oceania was the first to adopt a Regional Animal Welfare Strategy, which was endorsed in May 2008 (6). A regional strategy builds on the desire of neighbouring countries, which are often trading partners, to harmonise their approaches, in spite of the fact that they have economic, social, religious and cultural differences that give rise to a variety of different policies, programmes and societal expectations on the treatment of animals (4).

The Regional Strategy for Animal Welfare for the Americas (the Regional Strategy) was adopted in 2012, with the primary goal of ensuring a coordinated regional approach to implementing the OIE's animal welfare standards. Additionally, it aims to disseminate and promote science-based animal welfare through education and training, encouraging regional research, building partnerships and establishing alliances with stakeholders, and encouraging participation in the OIE standard-setting process (7).

In 2015 the OIE Regional Representation for the Americas sent a questionnaire to national Delegates and Animal Welfare Focal Points (AWFPs) in the region. The objective was to determine the level of awareness and implementation of the Regional Strategy and gather information to assist in developing an implementation plan. This paper analyses and discusses the replies to the questionnaire. It also reviews progress on the implementation of the OIE animal welfare standards in the Americas by comparing the information received in 2015 with that provided in response to a previous questionnaire conducted in 2006 by the joint Animal Welfare Collaborating Centre (8).

Materials and methods

The questionnaire employs the terms used in the Glossary of the OIE *Terrestrial Code* 2014 (2) and the Regional Strategy (7). The term ‘Veterinary Authority’ is defined in the *Terrestrial Code* as follows:

‘Governmental Authority of a Member Country, comprising veterinarians, other professionals and para-professionals, having the responsibility and competence for ensuring or supervising the implementation of animal health and welfare measures, international veterinary certification and other standards and recommendations in the *Code* in the whole territory’.

In the region of the Americas, the Veterinary Authority is normally a department within the Ministry of Agriculture.

The questionnaire sought information on the veterinary legislation, specifically the existence of laws and standards on animal welfare. This is important because governmental policies and programmes depend on an adequate legal infrastructure. For the questions on the legislation, the following terms were defined:

–‘specific standard’ means an adopted law, decree or resolution that makes reference to the goal of improving animal welfare in the objectives or the ‘considering’ section of the legal text

–‘secondary legislation’ means adopted legislation, e.g. a resolution setting out detailed requirements for the implementation of a law or decree.

The specific OIE standards considered in the questionnaire were *Terrestrial Code* Chapters 7.3 and 7.5, on the welfare of animals during transport and the welfare of animals during slaughter, respectively. These chapters are among the first animal welfare standards adopted by the OIE (in 2005). They are particularly relevant to countries in the Americas that trade livestock and animal products internationally: compliance with the OIE standards is important to facilitate trade. The questions were predominantly multiple-choice, with the option to select one answer or multiple answers. Some questions had to be answered using a short ‘free text’. The OIE Region of the Americas operates in two official languages of the OIE (English and Spanish), and care was taken to validate both texts to ensure that all Focal Points would understand the questions. To this end, the questionnaire was reviewed by OIE staff in the Regional and Sub-Regional Representations for the Americas, the OIE Collaborating Centre for Animal Welfare and Livestock Production Systems and by Dr L. Stuardo, the animal welfare contact point at OIE headquarters in Paris.

To facilitate data collection and analysis, the questionnaire was made available in the online programme Google Forms[®]. A drawback of this programme was that when the ‘Other’ option was selected, there was no option to further define the answer, so there was a limit to the information that could be collected with the questionnaire.

Knowing that some countries in the region do not have reliable Internet access, an electronic version in Word[®] format was also provided. On the 5th and 6th February 2015, Webex[®] teleconferences (in English and Spanish) were organised with all AWFPs in the region to explain the questionnaire and demonstrate how to use the application. After this, an Internet link to the questionnaire was sent to the 29 Member Countries in the region, with a request for a response by the 20 February 2015 (two-week deadline). During this period,

support was available to respondents in case of technical difficulties or queries about the questions.

For the purposes of this report, North America comprises Canada, Mexico and the United States of America (USA). South America comprises the continent south of Panama. Central America and the Caribbean consist of the remaining countries in the Americas.

A copy of the questionnaire is available from the Regional Representation of the Americas.

Results

Of the 29 countries in the region, 25 responded to the questionnaire (86%).

The countries that responded were: Argentina, Barbados, Bolivia, Brazil, Canada, Chile, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, Trinidad and Tobago, Uruguay, USA and Venezuela. No response was received from the Bahamas, Belize, Colombia or Guyana.

According to the records of the OIE Regional Representation, 26 of the 29 countries in the region have a designated AWFP. Of the four countries that did not respond to the questionnaire, three have not designated an AWFP.

Questionnaire part 1: Information on the person replying to the questionnaire

The OIE requested that the AWFP respond to the questionnaire. Nineteen of the 25 respondents (76%) were the designated AWFP for their country and six responses (24%) were provided by another person. The analysis presented here does not distinguish between the replies provided by the AWFP and those provided by another person on behalf of the AWFP.

Regarding knowledge and experience of animal welfare, four respondents (16%) had received formal education or training on animal welfare as an undergraduate; 14 respondents (56%) had received governmental 'in-service' training and 14 respondents (56%) had participated in other training, such as self-guided learning or training activities organised by industry or non-governmental organisations (NGOs). Four respondents (16%) indicated that they had not received any formal education or training on animal welfare. Note: respondents could select more than one answer, so the total is greater than 100%.

In relation to the duties of the AAFP, 12 respondents (48%) replied that they were required to provide education or training on animal welfare to undergraduate veterinarians; 18 respondents (72%) provided training to veterinarians in government; 11 respondents (44%) provided training to veterinarians in the private sector; 15 respondents (60%) provided training to veterinary para-professionals such as meat inspectors, laboratory staff and livestock inspectors, and 7 respondents (28%) were obliged to train 'others'. Seven respondents (28%) indicated that they were not required to provide education or training. Note: respondents could select more than one answer, so the total is greater than 100%.

When asked if they needed more formal education or training on animal welfare, 20 respondents (80%) said 'yes, with high priority', and two respondents (8%) said 'yes, with low priority'. Three respondents (12%) said 'no, not at this time'.

The relationship between the perceived need for formal training on animal welfare and the level of education/training received was analysed by using the t-test to calculate, for both groups, the 95% confidence interval of the mean number of 'sources of animal welfare training' from which the respondent had received education/training. There was no statistically significant variation between the groups, i.e. the perceived need for training does not have a statistically significant relationship with the number of educational activities reported by the AAFP.

The relationship between the perceived need for formal training and the obligation to provide training on animal welfare was analysed in the same way. Again, there was no statistically significant variation between the groups, indicating that the perceived need for training does not have a statistically significant relationship with the obligation of the AAFP to provide training.

The respondents who reported that they had not received any formal training on animal welfare and those who indicated that they were not required to provide training were examined in more detail by referring to the records held by the OIE Regional Representation. Of the four respondents that had not received formal education or training on animal welfare, only one was a newly appointed AAFP. Of the seven respondents that were not required to provide any training to other stakeholders, one was a newly appointed AAFP, and two were other people responding on behalf of their AAFP.

When asked to identify the training formats that were most practical for them, 22 respondents (88%) nominated 'in-person' (e.g. workshops or seminars); 16 respondents (64%) said 'online-interactive' (e.g. webinar, teleconference); 12 respondents (48%) said 'online without personal interaction' (e.g. online training modules) and two respondents (8%) answered 'other'. Note: respondents could select more than one answer, so the total is greater than 100%.

Questionnaire part 2: Awareness of the Regional Strategy

Twenty-two of the 25 respondents (88%) had read the document outlining the Regional Strategy and three (12%) had not. One of the respondents who had not read the Regional Strategy was a recently appointed AAFP. Four respondents (16%) indicated that the Regional Strategy had been published on the website of the national Veterinary Services (VS) and 20 respondents (80%) answered that it had not; one respondent (not a newly appointed AAFP) was not sure.

Table I shows the dissemination of information about the Regional Strategy by the Veterinary Authority to relevant agencies, i.e. state, provincial and local government authorities for animal health and

welfare, and to representatives of the regulated industries (i.e. stakeholders). In terms of activities performed by the Veterinary Authority in raising awareness and promoting the Regional Strategy, seven respondents (28%) indicated that their countries have established working groups; 14 countries (56%) have organised seminars or other training events; eight (32%) have produced publicity materials such as pamphlets or posters; three (12%) have performed other activities, and 8 (32%) have not undertaken any activity.

For the 15 countries that have organised working groups and/or seminars, the breakdown of agency and stakeholder participation is shown in Table II. Note: respondents could select more than one answer, so the total is greater than 100%.

Questionnaire parts 3 and 4: Implementation of Chapter 7.3 of the *Terrestrial Code* ‘Transport of animals by land’

Respondents were asked if their country had a ‘specific national standard’ for the welfare of animals during transportation by land, meaning an adopted law, decree or resolution that makes reference to the goal of improving animal welfare (for example, in the objectives or ‘considering’ section of the legal text).

If they answered ‘no’, they were asked if their country had a national standard that partially covered the welfare of animals during transport (e.g. a standard on disease control that establishes a requirement for veterinary inspection when loading livestock). The results are shown in Table III. The relationship between these responses and the geographic location of countries (North America; Central America and the Caribbean; South America) is shown in Figure 1.

In the 18 countries that have specific or partial standards for animal welfare during land transport, the consistency of the standards with the recommendations in the OIE *Terrestrial Code* Chapter 7.3 is illustrated in Figure 2.

Table IV illustrates how many of the 12 elements in Chapter 7.3 are covered by these specific or partial national standards. Based on the

calculation of arithmetic means, specific national standards can be interpreted as addressing approximately seven of these elements, while partial standards addressed between two and three of the 12 elements.

In relation to the coverage of animal species by the national standards (specific and partial), cattle are covered in all countries; most countries' standards cover pigs, horses and small ruminants (78%) and poultry (72%). Camelids are covered in 39% of countries.

Six of eighteen countries (33%) indicated that they had secondary legislation providing for the implementation of standards for welfare in transport.

With respect to the jurisdiction responsible for enforcing national standards (specific or partial) on animal transportation by land, 16 countries reported that the National Veterinary Authority was responsible, five reported that the provincial or state government was responsible, and two reported that the local or municipal government was responsible (Fig. 3). Note: respondents could select more than one answer.

Questionnaire part 5: Implementation of Chapter 7.5 of the *Terrestrial Code* 'Slaughter of animals for human consumption'

Respondents were asked if the national laws and standards that apply to the slaughter of animals for human consumption covered animal welfare. The results (yes or no) were distributed on an approximately 2:1 basis. Sixteen countries replied yes and all sixteen indicated that their standards covered animal welfare in the production of meat for domestic consumption as well as meat for export, with no countries indicating that there were specific provisions only for livestock in the export chain (Table V). Of the nine countries in which national laws and standards for the slaughter of animals for human consumption did not cover animal welfare, five did not have standards for the welfare of animals during transportation either.

The responses indicated that there were national laws and standards on this topic in all North American countries, 70% of South American countries and 38% of countries in Central America and the Caribbean.

Half of the countries in which livestock slaughter laws and standards cover animal welfare indicated that the standards either make specific reference to Chapter 7.5 or that they cover most of the recommendations in the chapter (Fig. 4). The standards cover on average five out of seven of these recommendations. The specific recommendations covered in the national standards are presented in Table VI. Cattle and pigs are the species most commonly covered by the laws and standards (100% and 81%, respectively), followed by small ruminants and poultry (69% and 69%, respectively), horses (56%) and camelids (31%).

Six respondents (33%) indicated that their countries had secondary legislation for the implementation of laws on slaughter. Four of these six countries (Argentina, Canada, Costa Rica and the USA) have secondary legislation for both transport and slaughter.

In relation to the responsibility for enforcement of animal welfare at the time of slaughter, all countries identified the national Veterinary Authority as the agency responsible, and some also reported that there was collaboration with state/provincial agencies (two countries) or local authorities (three countries).

Questionnaire part 6: Planning for the future

In this section, respondents were asked to identify three priority activities that are planned in their countries to implement the Regional Strategy (Table VII). Respondents were then asked to rate a series of tools according to their usefulness in raising awareness of and implementing the Regional Strategy. The following ratings were used: 1 = very useful, 2 = fairly useful, 3 = not useful, 4 = don't know. To determine which tools were generally considered to be most useful, the weighted mean of the first three categories was calculated and those with the lowest weighted mean were selected, as having the

values closest to one (See Table VIII). The answer ‘don’t know’ (one respondent) was excluded from the calculation.

The three items rated most useful, based on the abovementioned approach, were:

- direct training and information sessions for the AAFP
- list of training opportunities for veterinarians, veterinary paraprofessionals and industry
- electronic copies of technical manuals on animal welfare used by VS in the region.

Respondents were asked to suggest any other actions that they considered useful in raising awareness and promoting implementation of the Regional Strategy (Table IX).

In the final question, respondents were asked to assign priorities in relation to the future development of OIE standards and guidelines. The results are presented in Table X.

Discussion

This section of the report is presented under the following broad headings, reflecting the overall objectives of the questionnaire:

- the knowledge of AAFPs on animal welfare generally and the Regional Strategy specifically
- activities that Member Countries have undertaken to raise awareness of and promote the Regional Strategy, with a focus on public–private partnership
- the existence of national standards and their consistency with OIE recommendations on the welfare of animals during transport (Chapter 7.3) and slaughter (Chapter 7.5).
- the existence of secondary legislation for the implementation of the standards

– future needs.

The knowledge of Animal Welfare Focal Points on animal welfare generally and the Regional Strategy specifically

The results of the questionnaire indicate that AWFPs in the Americas need more education and training on animal welfare. While more than half of the respondents indicated that they had participated in governmental ‘in-service’ training, self-guided learning, or training provided by industry or NGOs, very few had received formal training in animal welfare as an undergraduate and some had not had any formal training on animal welfare. It appears that many AWFPs are involved with training, especially of government veterinarians and veterinary para-professionals, and other stakeholders. It was beyond the scope of the questionnaire to ascertain the nature of such training, but it could be assumed to relate to compliance with regulatory requirements. An AWF who has received no formal training will be at a disadvantage when it comes to training colleagues and stakeholders, some of whom may have more practical experience in animal welfare than the AWF themselves.

The low level of formal animal welfare education that respondents received as undergraduates highlights the need to develop and implement courses in animal welfare at undergraduate level in the Americas. This is consistent with the findings of Gallo and Cajiao (9), who reported that the development and implementation of animal welfare courses in the Americas is an ongoing priority.

The finding that 28% of AWFs are not required to provide training may reflect the availability of quality training from other sources or the lack of animal welfare laws and standards in some countries. If it is the latter, it is likely that this situation will change in the future and it will be even more important to equip AWFs with the skills and knowledge to provide an acceptable level of basic training to colleagues and stakeholders to promote compliance with animal welfare laws and standards in their countries.

In order to strengthen the capacities of AWFPs, 80% of respondents indicated that more formal education or training on animal welfare was a high priority. This response was not statistically linked to the AAFP's previous formal education or training or to his/her obligation to provide education or training. The countries that did not see additional education or training on animal welfare as a current priority were Argentina, Canada, Mexico and the USA. It may be speculated that this response could reflect factors such as: large VS with more than one person having responsibility for animal welfare (and therefore capacity to specialise) or the existence of multiple veterinary schools and good access to training.

The most unanimous positive response to a question was obtained in relation to the practicality of training formats, where 88% of respondents preferred in-person workshops or seminars. This may indicate that the AAFP is more able to focus on training in this format, without the distraction of his/her daily work. However, many respondents answered that other training formats i.e. online, with or without personal interaction, were also practical. These results indicate that a mixture of training strategies could be appropriate. For example, OIE seminars for AWFPs could be followed by teleconferences, or moderated email groups. There is scope for the OIE Animal Welfare Collaborating Centres to be involved in the delivery of training in various formats.

Most AWFPs stated that they had read the Regional Strategy but three respondents had not. Of these three, two had never attended an OIE AAFP seminar and one had attended a single seminar (in 2013).

Activities to raise awareness and promote the implementation of the Regional Strategy, with a focus on public-private partnership

Member countries are encouraged to publish the Regional Strategy on the website of their national VS but only four countries (16%) have done this. The dissemination of the Regional Strategy to date has focused mainly on the Veterinary Authority (92%) and the Ministry of Agriculture (56%). Some 20% to 30% of respondents indicated that

they have also worked to raise awareness among private veterinarians, state veterinarians, producers, transport operators and slaughterhouses. Little attention has been given to livestock saleyards (two respondents, 8%), which is disappointing, given that the VS are normally present in saleyards and there are risks to animal welfare in these locations. Seminars and working groups to raise awareness and promote the implementation of the Regional Strategy have mainly involved representatives of government departments; there was also significant involvement of private veterinarians. Participation by producers, transporters and operators of slaughterhouses was moderate; the participation of saleyard operators was extremely rare.

Eight respondents (32%) indicated that they had not performed activities to raise awareness or promote the implementation of the Regional Strategy. Three of the eight respondents in this group indicated that there was no national legislation relating to animal welfare during transport or slaughter, which suggests that animal welfare is not a high priority in these countries. In some countries this may reflect the greater importance placed on activities that directly benefit food security, such as animal disease control. In some cases, animal welfare is the responsibility of state or provincial authorities and the national government does not see animal welfare as its direct responsibility.

In total, ten respondents (40%) indicated that they had not read the Regional Strategy and/or had not performed any activities and/or do not have activities planned for the future in relation to the Regional Strategy. Half of these respondents had not attended an OIE seminar for AWFPS. All three sub-regions were affected by this lack of engagement and it suggests a level of disinterest that the OIE will need to address if the Regional Strategy is to be implemented with any success.

To date, little has been done in the region to encourage the participation of the private sector in the implementation of the Regional Strategy. Yet, an effective public–private partnership is crucial to improve animal welfare in the Americas. Coordination

between the public and private sector should be encouraged. Saleyards are a neglected sector where public–private partnership is particularly needed. The OIE should take steps to ensure that AWFPs are well informed and have tools at their disposal to carry out activities that are needed to raise awareness and promote the implementation of the Regional Strategy. Attendance at OIE AWFPP seminars is an important aspect and should be strongly encouraged.

National standards and their consistency with OIE recommendations on the welfare of animals during transport (Chapter 7.3) and slaughter (Chapter 7.5)

Approximately three quarters of countries in the Americas have a national standard on the welfare of animals during transport. When responses were broken down according to geographic location, it could be seen that there was a national standard in all countries in North America, 90% of countries in South America and around half the countries of Central America and the Caribbean. The situation is similar with respect to animal welfare at the time of slaughter. All countries in North America and 70% of countries in South America, but only 38% of countries in Central America and the Caribbean, have standards for the welfare of animals at the time of slaughter. It is recommended that the Regional Strategy take into account the differing circumstances in the region; many countries in Central America and the Caribbean need help in taking their first steps in the implementation of animal welfare standards (e.g. the adoption of primary legislation), whereas other countries in the region may be able to provide useful models and examples of how to proceed.

There was a moderate degree of alignment between national standards for land transport and the recommendations in *Terrestrial Code* Chapter 7.3. There was a higher level of consistency between national standards for slaughter and the OIE recommendations in *Terrestrial Code* Chapter 7.5, with all respondents reporting that the national laws and standards covered at least some of the OIE recommendations. The highest degree of alignment between national standards and the OIE recommendations was reported by the meat-exporting countries of

North America and South America and one country in Central America. This finding highlights the fact that the export meat sector is a driver for national animal welfare laws and standards in the Americas. As more countries develop a more significant involvement in the export sector, the implementation of the OIE animal welfare standards is likely to increase, in both the export and the domestic sector. This provides a great opportunity for advancing the Regional Strategy as governments in the region assign more priority to animal welfare.

When considering the alignment of national standards with the specific OIE recommendations on land transport, it was found that physical and procedural requirements for loading and unloading animals, and requirements for official documentation were generally well covered (>50% of the countries with a national standard). However, the OIE recommendations on veterinary involvement in transport, such as inspection at the time of loading and unloading, were respected in less than half of the countries with a national standard. Only 11% of countries followed the OIE recommendations on the accreditation of private veterinarians who inspect or approve animals at the time of transport. The OIE also recommends setting standards for the drivers of livestock transport vehicles, but only 11% of countries had any such requirements.

Turning to animal welfare at the time of slaughter: in general, national standards do cover the recommendations in *Terrestrial Code* Chapter 7.5. Half of the respondents from countries with a national law or standard indicated that most of the OIE recommendations were respected. Once again, arrangements for the accreditation of private veterinarians (e.g. for the inspection of animals at the time of slaughter) were the least respected of all the recommendations in Chapter 7.5.

The animal welfare survey conducted in the Americas in 2006 was completed by 76% of Member Countries in the region. Although the questions and topics covered differed from those in the current questionnaire, it is possible to make some comparisons and draw some

conclusions about what has changed in the past decade. In the 2006 survey, 50% of countries reported that they had no animal welfare legislation for livestock. Approximately 60% of the countries that did not have legislation in 2006 now have laws or standards for the welfare of animals during transport and/or slaughter for human consumption. This represents a significant improvement. For the countries that did have animal welfare laws in 2006, 36% of respondents indicated that the legislation was based on OIE standards. In 2015, this situation had improved, particularly in relation to the laws for slaughter (39% of respondents indicated that the legislation covered most of the OIE recommendations for land transport and 50% for slaughter). This suggests that countries in the Americas are making efforts to harmonise their laws with the international standards of the OIE.

Overall, these findings indicate that there should be more involvement of veterinarians, both official and private sector, in animal welfare at the time of transport. Veterinarians should be primary advocates of animal welfare and should be well equipped to deal with animal welfare problems. The lack of attention to the accreditation of private veterinarians in roles relating to animal transport and slaughter suggests that there is room to improve the collaboration between veterinarians in the public and private sectors. The livestock saleyard sector is relatively neglected and there is a lack of requirements for drivers of livestock transport vehicles, even in countries that have laws and standards that reflect the OIE standards in large part. These are key areas that should be addressed in the implementation of the Regional Strategy.

In all countries, responsibility for enforcing national animal welfare standards for slaughter lies with the National Veterinary Authority. In 89% of countries, it is also responsible for enforcing welfare standards for transport. Authority for enforcement may also be shared with state/provincial or local governments. Two countries reported that state or provincial governments, not the federal government, were responsible for animal welfare. Neither country had taken action to disseminate the Regional Strategy or organised activities beyond the

federal level. In these countries, the implementation of the Regional Strategy will depend on the willingness of national VS to engage with sub-national governmental agencies and stakeholders.

Secondary legislation for the implementation of standards

In response to questions on the legal infrastructure for ensuring the welfare of animals during transport and slaughter, 18 respondents said that they had national standards for animal welfare during transport (nine countries had transport legislation that covered welfare and nine had specific legislation) and 16 respondents indicated that their livestock slaughter laws/standards covered animal welfare. In contrast, only six respondents indicated that their countries had secondary legislation on animal transport and six respondents indicated that this was the case for slaughter. Four of the six respondents (Argentina, Canada, Costa Rica and the USA) indicated that they had secondary legislation on both transport and slaughter. There was evidence of some confusion in the responses to this question, which probably reflects the failure of the questions to provide for the variability of national legal frameworks in the Americas. Nonetheless, based on the fact that 18 countries identified plans to modify animal welfare-related legislation in future (see next section) the authors conclude that the VS face significant challenges in relation to the legal framework for animal welfare.

Future needs

It is encouraging to note that all but two countries reported that they plan to undertake activities relevant to the Regional Strategy. In most cases, the planned activities include raising awareness among stakeholders and providing them with training. Eighteen countries indicated that they intended to take action to modify primary or secondary legislation on animal welfare. Legislative change is a key component of the Regional Strategy and indeed vital for improving animal welfare in the region. In addition to establishing primary legislation, attention should be paid to the development of appropriate secondary legislation, to ensure that adopted laws are actually implemented.

An important part of the questionnaire concerns the support that AWFPs need to raise awareness and promote the implementation of the Regional Strategy. There was good agreement on the need to build the capacity of AWFPs by means of direct training and to provide information about other training opportunities. Respondents also highlighted the need for access to materials that can be used to promote animal welfare generally and the Regional Strategy specifically. In the implementation of the Regional Strategy, the OIE should consider developing such materials, as well as strategies to encourage the sharing of these materials between countries in the region. Respondents also identified a significant need among stakeholders for training on animal welfare.

In terms of future OIE standards and guidelines, the topics of greatest interest are animal welfare indicators, guidance on the implementation of the existing standards, and the scientific basis for animal welfare standards. Indicators and guidance on the implementation of existing standards are clearly relevant to ensuring compliance with legal requirements. The strong interest in the scientific basis for animal welfare standards may reflect the lack of formal education on animal welfare and the need to convince industry of the benefits to be obtained through improved animal welfare, thereby encouraging compliance with legal requirements and standards. There is interest in the relevance of animal welfare to the World Trade Organization legal framework but there is also interest in topics that do not affect international trade: more than half the respondents expressed interest in the development of OIE standards and guidelines on wild animals.

Key conclusions and recommendations

In the national Veterinary Authority, the designated AAFP provides an essential interface with the OIE in relation to the development and implementation of the OIE animal welfare standards. Many AWFPs in the Americas did not receive education on animal welfare as part of their veterinary training; some lack experience in the field of animal welfare and a few have not even read the Regional Strategy that was adopted in 2012. Progress in raising awareness of the Regional

Strategy has been rather slow. There is a need to strengthen the capacities of these Focal Points, and the OIE AWFP seminars play an important part in this capacity building.

Within Member Countries of the Americas, the promotion of the Regional Strategy has generally been limited to raising awareness within the Veterinary Authority and the Ministry of Agriculture. More should be done to strengthen links with sub-national agencies responsible for animal health and welfare, and with private veterinarians and representatives of the regulated industries (stakeholders), especially the livestock saleyard sector.

Countries in North and South America generally have laws and standards on the welfare of livestock at the time of transport and slaughter and the requirements are quite well aligned with the recommendations in *Terrestrial Code* Chapters 7.3 and 7.5. This is an improvement on the situation in 2006. The elements in the two chapters that are less well implemented pertain to veterinary inspection and accreditation.

The countries of Central America and the Caribbean are generally less advanced in the implementation of the OIE animal welfare standards. Accordingly, it is recommended that the Regional Strategy draw upon the skills and knowledge of 'more advanced' countries to support others in taking the first steps to implement animal welfare standards, e.g. the development of national legislation.

Member Countries in the Americas are clearly conscious of the need to promote the implementation of the OIE standards. National priorities include the promulgation of new or revised veterinary legislation and outreach to relevant government agencies and stakeholders, including the provision of training on animal welfare.

The OIE should consider the development of materials that can be used to raise awareness of animal welfare generally and of the Regional Strategy in particular. Strategies to encourage the sharing of materials such as technical manuals within the region would also be valuable.

International trade is probably the key driver of improved animal welfare in the Americas. However, respondents did not agree that standards development in future should only focus on topics relevant to international trade (see Table X), which suggests that broader societal interest also plays a role. It is important to build relationships between the regulators (the Veterinary Authority and sub-national government agencies responsible for animal health and welfare) and the regulated industries. This ‘public–private partnership’ is fundamental in achieving sustainable improvement in the welfare of farm animals.

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References

1. World Organisation for Animal Health (OIE) (2015). – The OIE’s achievements in animal welfare. OIE, Paris. Available at: www.oie.int/en/animal-welfare/animal-welfare-keythemes/ (accessed on 24 February 2015).
2. World Organisation for Animal Health (OIE) (2015). – Terrestrial Animal Health Code, 24th Ed. OIE, Paris. Available at: www.oie.int/en/international-standard-setting/terrestrial-code/access-online/ (accessed on 10 August 2015).
3. World Organisation for Animal Health (OIE) (2015). – Aquatic Animal Health Code, 17th Ed. OIE, Paris. Available at: www.oie.int/en/international-standard-setting/aquatic-code/ (accessed on 24 February 2015).

4. Huertas S.M., Gallo C. & Galindo F. (2014). – Drivers of animal welfare policy in the Americas. *In* Animal welfare: focusing on the future (D.J. Mellor & A.C.D Bayvel, eds). *Rev. Sci. Tech. Off. Int. Epiz.*, **33** (1), 67–76.

5. Secco M. (2008). – Voluntary schemes to apply OIE animal welfare standards. Uruguay: one experience in the private sector. *In* Proc. 2nd OIE Global Conference on Animal Welfare: ‘Putting the OIE standards to work’, 20–22 October 2008, Cairo. European Commission, Luxembourg, 184.

6. World Organisation for Animal Health (OIE) (2015). – Regional Animal Welfare Strategy, Asia, the Far East and Oceania, 2013–2015, 2nd Ed. OIE Regional Representation for Asia and the Pacific, Tokyo. Available at: www.rr-asia.oie.int/fileadmin/Regional_Representation/Programme/RAWS/Regional_Animal_Welfare_Strategy_Edition_2_2013-15.pdf (accessed on 5 March 2015).

7. World Organisation for Animal Health (OIE) (2015). – Regional Animal Welfare Strategy for the Americas. OIE Regional Representation for the Americas, Buenos Aires. Available at: www.rr-americas.oie.int/index.htm (accessed on 24 February 2015).

8. Gallo C.B. (2006). – Animal welfare in the Americas. *In* Working Document of the 18th Conference of the OIE Regional Commission for the Americas, 28 November to 2 December, Florianopolis, paragraphs 143 – 161 and Appendix 4. Available at: www.oie.int/RR-Americas/in/comregional/docs/Florianopolis_Report_A.pdf (accessed on 5 March 2015).

9. Gallo C.B. & Cajiao M.N. (2013). – Bienestar animal. *In* Perfil Profesional del Médico Veterinario en Latinoamérica – Visión al 2030 (J. Taylor, ed.). Amateditorial, Guadalajara, Mexico, 33–42.

Table I
Diffusion of the Regional Strategy to government agencies and representatives of regulated industries (stakeholders) in the 25 countries that responded to the questionnaire

Government agency or stakeholder	No. of countries in which the agency or stakeholder was informed about the Regional Strategy	
Veterinary Authority	23	(92%)
Ministry of Agriculture	14	(56%)
Veterinarians in the private sector	7	(28%)
Provincial or State veterinarians	7	(28%)
Livestock producers	6	(24%)
Livestock transporters	5	(20%)
Slaughterhouse operators	5	(20%)
Livestock industry associations/Rural society	4	(16%)
Local government/municipal agencies	3	(12%)
Operators of livestock saleyards	2	(8%)
Other	2	(8%)
None of the above	1	(4%)
Not sure	1	(4%)

Table II**Agency and stakeholder participation in working groups or seminars**

Fifteen of the 25 countries that responded to the questionnaire organised groups and seminars

Government agency or stakeholder	No. of countries in which the agency or stakeholder participated in working groups or seminars	
Official veterinarians	15	(100%)
Private veterinarians	10	(67%)
National government departments	10	(67%)
Slaughterhouse operators	7	(47%)
Provincial/State government agencies	6	(40%)
Livestock producers	6	(40%)
Livestock transporters	6	(40%)
Local/Municipal government agencies	4	(27%)
Livestock industry associations/Rural society	4	(27%)
Operators of livestock saleyards	3	(20%)
Other	2	(13%)
None of the above	0	(0%)

Table III**Number of countries which have national standards for the welfare of animals during transportation by land**

Type of standard	No. of countries	
Specific national standard	9	(36%)
Specific national standard applying only to the export sector	0	(0%)
Partial coverage by a national standard	9	(36%)
No national standard	7	(28%)

Table IV
National standards: coverage of the recommendations in Chapter 7.3 of the Terrestrial Animal Health Code in the 18 countries with standards for the welfare of animals during transportation by land

Recommendation	No. of countries where this element is covered by national legislation
Physical requirements for facilities used to load animals	11 (61%)
Requirements for animal transport vehicles (such as veterinary approval of vehicles)	10 (56%)
Procedural requirements for loading animals	10 (56%)
Requirements for official documents approving animal transport	9 (50%)
Procedural requirements for unloading animals	9 (50%)
Veterinary inspection of animals at the time of unloading	8 (44%)
Veterinary inspection of animals prior to or at the time of loading	7 (39%)
Veterinary approval of animal health or welfare before loading	7 (39%)
Physical requirements for facilities used to unload animals	7 (39%)
Requirements that apply during the journey (e.g. maximum time in the vehicle, maximum journey distance etc.)	6 (33%)
Other	3 (17%)
None of the above	3 (17%)
Requirements for the drivers of transport vehicles	2 (11%)
Accreditation of private veterinarians for inspecting or approving animals being transported	2 (11%)

Table V**Number of countries which have national standards for the welfare of animals during slaughter for human consumption**

Do slaughter laws / standards cover animal welfare?	No. of countries
Yes, they cover animal welfare for the production of meat for export and domestic consumption	16 (64%)
Yes, they cover animal welfare but only for the production of meat for export	0 (0%)
No, they do not cover animal welfare	9 (36%)

Table VI**National standards: coverage of the recommendations in *Terrestrial Code* Chapter 7.5 in the 16 countries with standards for animal welfare during slaughter for human consumption**

Recommendation	No. of countries where this element is covered by national legislation
The movement and handling of animals	15 (94%)
The design and construction of lairages	15 (94%)
The management of animals in lairages	13 (81%)
Procedures for restraint at the time of stunning	12 (75%)
Equipment / methods for stunning and sticking	11 (69%)
Accreditation of private veterinarians for the purpose of inspecting animals at the time of slaughter	8 (50%)
The management of fetuses	5 (31%)
Other	1 (6%)
None of the above	0 (0%)

Table VII**Priority activities to implement the Regional Strategy**

Number of respondents who listed the activity among their top three priorities

Planned activity	No. of respondents
Implement training programmes for stakeholders	20
Address problems with legislation (primary or secondary)	18
Publicise the Regional Strategy, including on the website of the VS	11
Hold stakeholder meetings or set up working groups	6
VS activities to improve engagement with the OIE	4
Develop undergraduate curriculum on animal welfare	3
Activities of VS with a regional focus	3
No actions planned	2
Other	2
Applied research on production systems	1
Develop activities based on OIE standards	1

Table VIII**Usefulness of items to raise awareness and implement the Regional Strategy**

The three items regarded to be most useful are shown in bold and underlined

Proposed tool	Very useful	Fairly useful	Not useful	Weighted mean
Database of scientific references on animal welfare	60%	28%	8%	1.4
Database of relevant laws, resolutions and administrative decisions from countries in the region	52%	44%	0%	1.4
Electronic copies of Technical Manuals on animal welfare used by VS in the region	60%	32%	0%	<u>1.24</u>
Electronic copies of information, such as pamphlets or posters that can be used for raising awareness	52%	40%	8%	1.56
List of training opportunities for veterinarians, veterinary para-professionals and industry	72%	24%	0%	<u>1.2</u>
Email newsletter for AWFPs / other interested persons	64%	32%	0%	1.28
Electronic copies of Powerpoint presentations on the Regional Strategy and the OIE standards	60%	40%	0%	1.4
Direct training/information sessions for AWFPs	88%	8%	0%	<u>1.04</u>

AWFP: Animal Welfare Focal Point

VS: Veterinary Services

Table IX
Other actions that respondents considered useful in raising awareness and promoting the implementation of the Regional Strategy

Action	No. of respondents
Stakeholder training programmes on animal welfare (generally) and the Regional Strategy (specifically)	7
Materials for use in countries to promote animal welfare (generally) and the Regional Strategy (specifically)	5
No action suggested	4
Means for sharing information on animal welfare between countries in the Region	2
Incentives for countries to implement the Regional Strategy	2
Assistance with specific animal welfare problems within the country	1
Encourage research on animal welfare	1
Induction programme for AWFPs	1
Meetings with stakeholders	1
Provide parameters for animal welfare requirements	1

Table X
Subjects that respondents considered priorities for future OIE standards and guidelines

Subject	No. of respondents
Animal welfare indicators	20 (80%)
More guidance on implementation of existing standards	18 (72%)
Scientific basis for animal welfare standards	18 (72%)
The WTO obligations of Member Countries with respect to animal welfare measures	16 (64%)
Topics that affect wild animals in the wild state or in parks and zoos	14 (56%)
Topics that do not affect international trade (e.g. welfare of companion animals, animals in shows and circuses)	9 (36%)
Only topics that directly affect international trade	6 (24%)
Topics that are addressed in private standards	6 (24%)
Other	3 (12%)

Fig. 1
Percentage of countries in each sub-region with a standard (specific or partial) for the welfare of animals during transportation

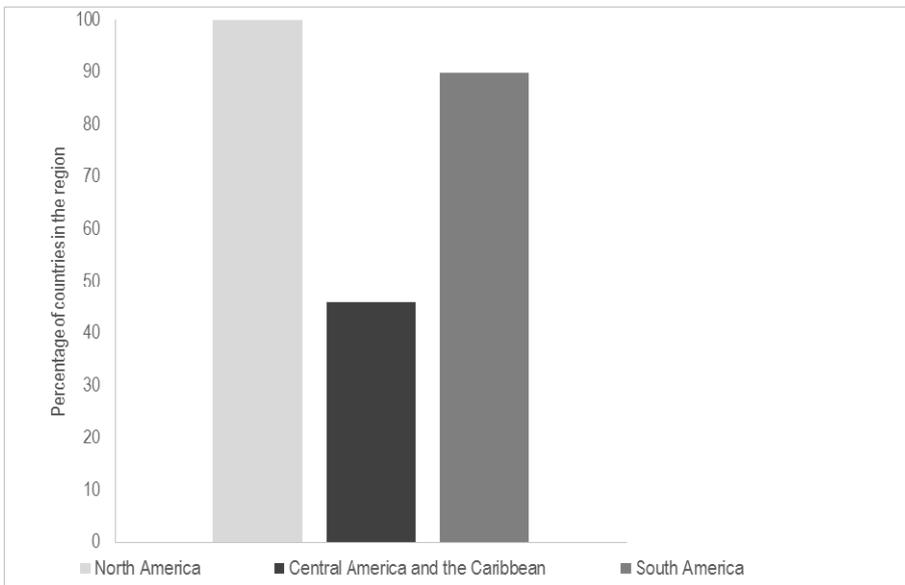


Fig. 2
Consistency between national laws/standards and the OIE Terrestrial Code Chapter 7.3 ‘Transport of animals by land’

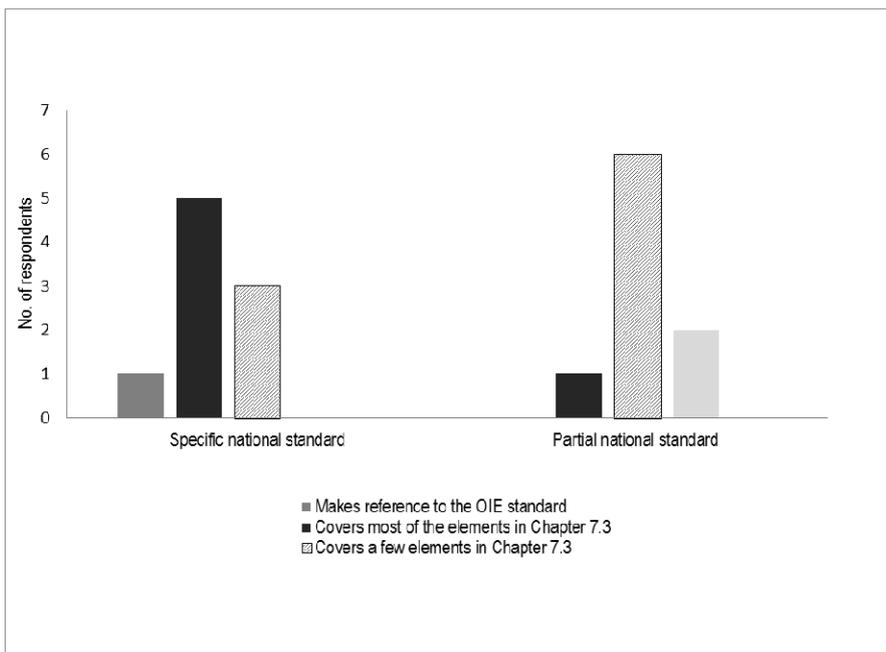


Fig. 3
Authority responsible for enforcing standards on animal transport by land

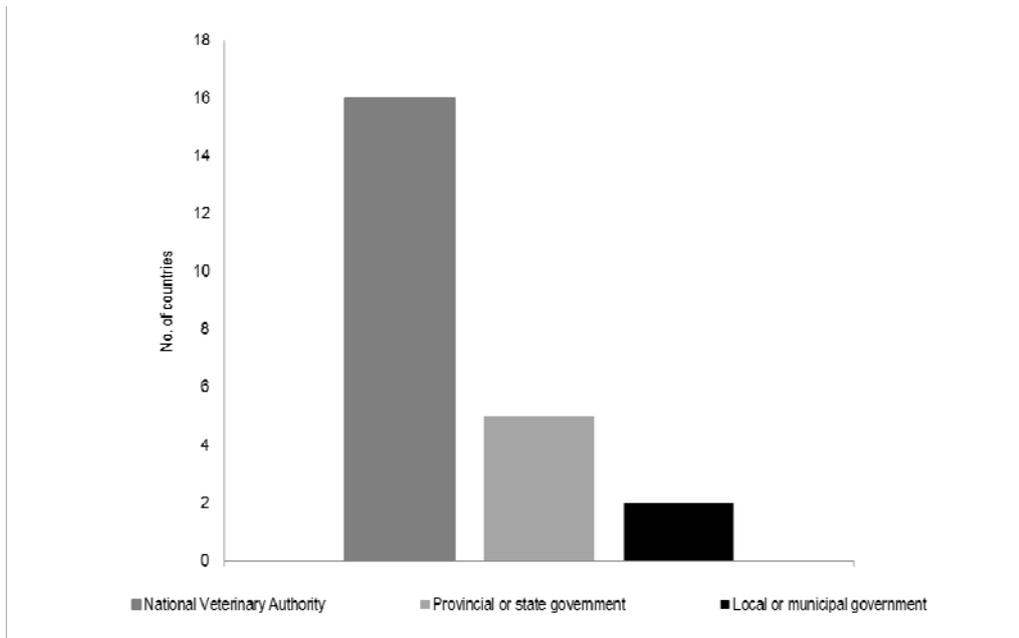


Fig. 4
Consistency between national laws/standards and *Terrestrial Code* Chapter 7.5 ‘Slaughter of animals for human consumption’

