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Zoonosis and food safety – improving collaboration between animal and public health professionals to achieve a better outcome

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Summary: Health issues at the human-animal-ecosystems interface, including zoonosis and food safety events, cannot be effectively addressed and controlled by one health sector. The Tripartite partners (OIE, FAO and WHO) have been leading several programmes and activities at the global and regional levels to address zoonosis and food safety issues, including the development of the Tripartite Zoonosis Guide to strengthen capacities for zoonosis control by OIE Members. Multisectoral coordination mechanisms (MCMs) play a pivotal role to ensure effective control with sustainability. In the present report, to strengthen MCMs and make collaborations among relevant sectors more effective, MCMs of the Members were assessed by a questionnaire study. A total of 32 Members provided responses. Establishment of an MCM was achieved by 27 of the 32 Members, but obstacles such as inadequate governance or resources continue to hamper the establishment of an MCM by some. An MCM was achieved when the Member could identify necessary subnational structures, priority critical technical activities, and hold internal communications on a regular basis. On the other hand, efficient utilisation of domestic resources by mobilisation and funding allocation in line with a strategic plan was a big challenge at the regional level. Regarding financial resources, two-thirds of Members were supported by national sources for activities relating to zoonosis and food safety issues. However, a limited amount of funding for activities to control zoonosis and food safety issues comes from foreign organisations in several Members. A gap between Members was also confirmed in terms of governance elements agreed upon by members of the MCM. A self-monitoring and evaluation framework had been developed in only about half of the Members with an MCM. The Tripartite partners should continuously assist Members by providing technical inputs and raising capacity for control of zoonosis and food safety issues.

Keywords: Asia–Pacific Region – Food and Agriculture Organization of the United Nations (FAO) – food safety – multisectoral coordination mechanism – OIE Regional Commission – Tripartite Zoonosis Guide – World Health Organization (WHO) – World Organisation for Animal Health (OIE) – zoonosis.

1. Introduction

The risks of zoonotic and foodborne diseases have increased in recent decades due to socioeconomic and scientific factors. Given the complexity of the animal-human-environment interface and food supply chains, both types of disease events should be monitored, assessed and responded to using a One Health approach based on multisectoral coordination.

The World Organisation for Animal Health (OIE), in coordination and collaboration with its Tripartite partners (namely the Food and Agriculture Organization of the United Nations [FAO] and the World

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Health Organization [WHO]), has been leading several programmes and activities at the global and regional level to address zoonosis and food safety issues. In 2019, to help Members strengthen their capacities for zoonosis control, the Tripartite developed the *Tripartite Zoonosis Guide* (TZG) [1] to update and expand the initial jointly-developed, zoonotic diseases-specific guidance document to cover prevention, preparedness, detection and response to zoonotic threats at the animal-human-environment interface. These guidelines are flexible enough to cover other health threats at the animal-human-environment interface, including food safety and antimicrobial resistance. Though the Tripartite realises that the best way to build structures and systems to address zoonotic and food safety issues in every situation is not yet known, the TZG describes the effectiveness of developing a functional multisectoral coordination mechanism (MCM) to ensure proficient implementation of activities for control zoonotic and food safety issues.

The Tripartite in the Asia and the Pacific Region implemented a questionnaire study via the 8th Asia-Pacific Workshop on Multi-sectoral Collaboration at the Animal-Human-Ecosystem Interface in April 2019, to collect information relevant to current multisectoral One Health mechanisms. These results were beneficial to analyse the current situation, achievements and challenges in MCMs, but not enough to satisfy all the critical functions and activities of MCM outlined in the TZG.

This report aims to identify the structure and functional characteristics of the Members' current MCMs between animal and public health professionals for the control of zoonosis and food safety issues and to explore any gaps. The questionnaire survey for the 31st Conference of the OIE Regional Commission for Asia, the Far East and Oceania (September 2019) was thus conducted to obtain comprehensive information about current MCMs in the region and combined with results of the questionnaire study from the 8th Asia-Pacific Workshop on Multi-sectoral Collaboration at the Animal-Human-Ecosystem Interface. The 36 OIE Delegates of the OIE Regional Commission for Asia, the Far East and Oceania were therefore requested to complete the questionnaire comprising five aspects of MCM characteristics, namely:

- Establishment of an MCM
- Governance of MCMs and other operationalisation aspects of MCMs
- Key achievements in MCMs
- Key challenges faced in the multisectoral collaboration
- Key priority activities to further strengthen multisectoral collaboration

Between 19th June 2019 and 23rd July 2019, completed questionnaires were received from 32 of the 36 (89%) Members of the OIE Regional Commission for Asia, the Far East and Oceania, including: Australia, Bangladesh, Bhutan, Brunei, the People's Republic of China, Chinese Taipei, Fiji, India, Indonesia, Iran, Iraq, Japan, the Republic of Korea, Laos, Malaysia, Maldives, the Federal States of Micronesia, Mongolia, Myanmar, Nepal, New Caledonia, New Zealand, Pakistan, Papua New Guinea, the Philippines, Singapore, Sri Lanka, Thailand, Timor Leste, the United States of America, Vanuatu and Vietnam. This report provides results of this questionnaire survey and information on structural and functional aspects of current MCMs in the region by referencing the previous questionnaire survey results.

2. Results

The questionnaire regarding collaboration between animal and public health sectors was completed by 32 of the 36 (89%) Members of the OIE Regional Commission for Asia, the Far East and Oceania.

2.1. Establishment of a multisectoral coordination mechanism (MCM)

The questionnaire included three questions relating to the establishment by Members of an MCM for zoonosis and food safety issues, and to potential members and resources of these MCMs.

When asked about the establishment of an official MCM for zoonoses or food safety issues at the national level, it was confirmed in 27 of the 32 (84%) responding Members.

For the five Members which had not established an official MCM, several reasons hampering the MCM establishment were given, including:

- Lack of government initiative
- Improper resource planning
- Low technical capacity.

Other reasons given for not establishing a specific MCM were that one Member was about to develop a One Health Strategic Plan and another Member already had a specific committee to cover zoonosis and food safety issues.

Members were asked whether all official and unofficial coordination functions, mechanisms and infrastructures had been identified for the establishment of a potential MCM. Twenty-three Members had done so while the remaining nine, including the five Members which had not established the MCM at the national level, had not.

2.2. Governance of MCMs and other operationalisation aspects of MCMs

For the 27 Members which had developed an official MCM for zoonosis and food safety issues at the national level, further information regarding operational aspects of the MCM was sought using three questions.

The 27 Members were asked which elements of governance had already been agreed among members of the MCM for zoonosis and food safety issues. 'Leadership of the MCM' was the most frequent response, received from 22 (81%) Members (Fig. 1).

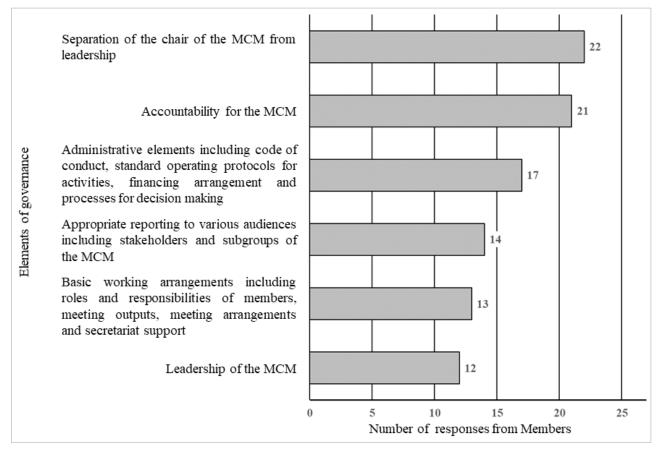


Fig. 1. – Elements of governance agreed within multisectoral coordination mechanisms for zoonosis or food safety issues. Valid responses obtained from 27 Members are accounted for in each element or question. MCM: multisectoral coordination mechanism

Following that, 'basic working arrangement' (21 responses, 78%), 'appropriate reporting to various audiences' (17 responses, 63%) and 'administrative elements' (14 responses, 52%) were selected by more than half of this group of respondents. 'Agreement of accountability' (13 responses, 48%) and 'separation of the chair from leadership' (12 responses, 44%) were also reported. Additionally, 'presence of a reporting system at several levels (national, provincial, or district)' was noted from one Member and 'adoption of One Health approach' was noted from another Member as necessary for effective MCMs.

The 27 Members were asked if there were any formal governance documents for zoonosis and food safety issues coordinated by the MCM, including national framework, strategy and action plans. Twenty-four (89%) Members responded that they had already developed such documents.

The 24 Members with these documents were further asked whether operationalisation aspects of the MCM were cited in a section on the strategic planning of the documents. It was revealed that they were included in the strategic planning of formal governance documents in 22 of the 24 (92%) Members.

2.3. Key achievements in MCMs

Members were asked three questions regarding the establishment of an MCM at the subnational level and five questions regarding resource mapping, which are considered critical achievements under the MCM, as per the TZG.

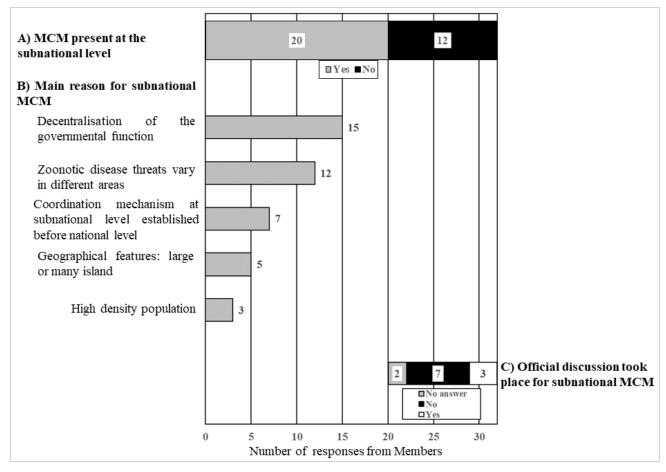


Fig. 2. – Elements and reasons for the establishment of a multisectoral coordination mechanism at subnational level. Valid responses obtained from 27 Members are accounted for in each element or question. MCM: multisectoral coordination mechanism

The 20 Members with an MCM at the subnational level were further asked to list the main reasons for its establishment. Among the five potential reasons, 'decentralisation of the governmental function' was the most frequent response from 15 Members (75%) (Fig. 2B). Following that, 'zoonotic disease threats varying in different areas' (12 responses, 60%), 'coordination mechanism established at subnational level before national level' (7 responses, 35%) were confirmed as important reasons for the establishment of the MCM. On the other hand, 'geographical features' (5 responses, 25%) and 'high population density' (3 responses, 15%) were the main reasons given by a few Members. Some of the geographically small Members considered that a coordination mechanism at the subnational level was not needed in their cases.

The 12 Members which had not established an MCM at the subnational level were asked whether there had been an official discussion among members of the national MCM for establishment at the subnational level. Three of the 12 (25%) Members responded that they had started the official discussion, but the others had not (Fig. 2C).

The 27 Members who had established an MCM for zoonosis and food safety issues were asked whether this national MCM had conducted a mapping of relevant infrastructure resources available within the government and from other sectors. Seventeen of the 27 (63%) Members responded that they had done so (Fig. 3A).

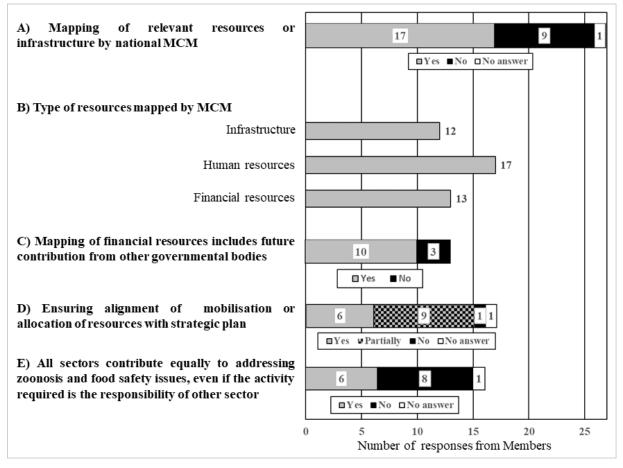


Fig. 3. Resource mapping, mobilisation, allocation and responsibility for activities relating to zoonosis or food safety issues. Valid responses obtained from 27 Members are accounted for in each element or question. MCM: multisectoral coordination mechanism

The 17 Members which had conducted mapping analysis were asked which type of resources (financial resources, human resources and infrastructure) had been mapped by the MCM. It was indicated that all of three types were mapped by 11 of the 17 (65%) Members. The MCM in all 17 Members (100%) had mapped human resources, while financial resources and infrastructure were mapped by 13 (76%) and 12 (71%) of the 17 Members, respectively (Fig. 3B).

The 13 Members in which financial resources had been mapped were asked whether the mapping analysis had considered future contributions from other governmental bodies responsible for areas where impacts of health burden might become significant. Ten of the 13 Members (77%) responded that they did (Fig. 3C).

The 17 Members which conducted the mapping analysis were asked whether the MCM ensured aligning mobilisation or allocation of financial, human resources as well as infrastructure with strategic priorities. Six (35%) and nine (53%) Members, respectively, responded that they 'fully' or 'partially' ensured this alignment (Fig. 3D). Aligning mobilisation or allocation of those resources was not ensured by only one (5%) Member. One (5%) Member did not respond to this question.

The 15 Members for which aligning mobilisation or allocation of those resources was fully or partially ensured with high priority were asked to identify whether the MCM ensured that, even if the activity required was not their own responsibility, all sectors affected by a zoonosis and food safety issue would contribute equally to addressing it. Six (40%) Members responded that they would contribute equally while the other eight (53%) answered that they would not do so (Fig. 3E). One (7%) Member did not respond to this question.

2.4. Key challenges faced in inter-sectoral collaboration

Members were asked three questions regarding funds and their source for MCMs and also the development of monitoring and evaluation system of MCMs.

Members were asked to list the funding sources in animal health sector for activities relating to zoonosis and food safety issues. Among the four specific categories, 'government' was the most frequent response from 31 (97%) Members (Fig. 4A). After that, 'national private sectors' (13 responses, 41%) and 'foreign aid' (11 responses, 34%) were considered essential funding sources. 'Foreign private sectors and others' were also reported as funding sources for four (13%) Members.

Subsequently, Members were asked what percentage of funds for activities relating to zoonosis and food safety issues came from national sources. Though all Members responded to the query, appropriate responses, including 21 numerical and five categorical responses were obtained from 26 Members. Numerical responses were categorized into five ranges; 0–20%, 21–40%, 41–60%, 61–80%, and 81–100%. Categorical responses were converted to numerical ranges. 'Very small component' was defined as the corresponding to the '0-20%' range and 'Majority' as the '81–100%'range. Thirteen (50%) responses ranged from 81% to 100% (Fig. 4B). One response (4%) corresponded to the range '61% to 80%' and three responses (12%), to the range '41% to 60%'. On the other hand, four (15%) responses corresponded to the range '0 to 20%' and five (19%), to the range '21% to 40%'.

The 27 Members which had established MCMs for zoonosis and food safety issues at the national level were asked how much funding came from the animal health sector. Fourteen (52%) Members responded that 'some' funding and seven (26%) that 'very little' funding comes from the animal health sector for MCM activities (Fig. 4C). On the other hand, no (0%) Members responded that 'all' funding and five (19%) responded that 'most' funding comes from the animal health sector. The 27 Members which had established an MCM for zoonosis and food safety issues were asked whether guidelines for self-monitoring and evaluation system of the MCM had been developed. Fourteen (52%) Members responded that they had already developed guidelines while 12 (44%) Members answered that they had not done so yet.

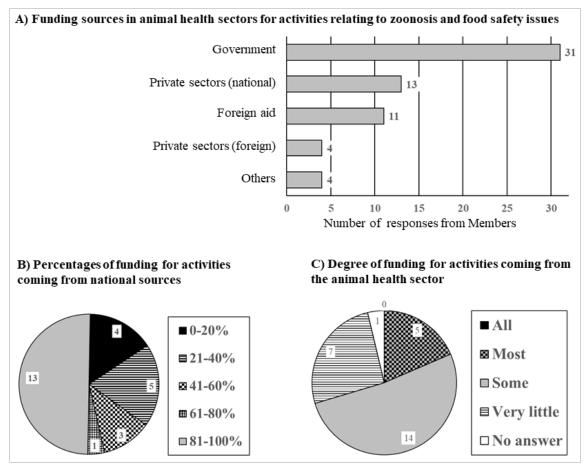


Fig. 4. Funding of activities for zoonosis or food safety issues in the animal health sector. Valid responses obtained from 32 Members are accounted for in each element or question.

The 14 Members which had developed guidelines for a self-monitoring and evaluation system of the MCM were further asked about its implementation. Eleven (79%) Members had already started self-monitoring and evaluation, and two (14%) were preparing for its implementation. Only one (7%) Member did not have any practical schedule for its implementation due to cross-sectoral administrative issues.

2.5. Key priority activities to further strengthen multisectoral collaboration

Members were asked four questions regarding key priority activities under the MCM and three questions regarding regular meetings with partner organisations and stakeholders.

The 27 Members which had established an MCM for zoonosis and food safety issues were asked if specific technical activities to be implemented for more effective control of these issues had been identified. Twenty-five (93%) Members responded that their MCM had identified specific technical activities (Fig. 5A).

The twenty-five Members which identified specific activities to be implemented were asked to list the activities in an open-ended question. Among 23 appropriate responses, ten (40%) Members listed activities relating to 'surveillance systems' (Fig. 5B). Thereafter, responses were related to 'regulations or guidelines for emergency preparedness' (seven responses, 28%), 'risk reduction activities' (five responses, 20%), 'awareness' (four responses, 16%), 'information sharing system' (four responses, 16%), 'technical capacity building' (four responses, 16%) and 'outbreak investigation and response' (three responses, 12%). Few responses including 'research' (two responses, 8%), 'prioritising zoonosis' (two responses, 8%), 'risk assessments or analysis' (two responses, 8%), 'simulation exercises' (one response, 4%)', 'meetings or conferences' (one response, 4%), were also received.

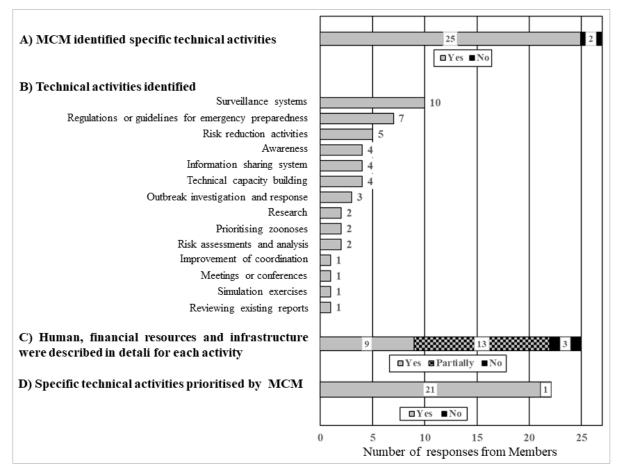


Fig. 5. Specific technical activities to be implemented by the multisectoral coordination mechanism for more effective control of zoonotic or food safety issues. Valid responses obtained from 27 Members are accounted for in each element or question. MCM: multisectoral coordination mechanism

The 25 Members which had identified specific technical activities to be implemented were further asked if detailed descriptions regarding financial, human and infrastructural resources existed for each activity. It was revealed that these resources were 'fully', and 'partially' described in detail for the technical activities in nine (36%), and 13 (52%) Members, respectively (Fig. 5C).

The twenty-two Members which had some detailed descriptions of the resources needed for the MCM specific technical activities were further asked whether these specific technical activities had been prioritised. Twenty-one of the 22 (95%) Members responded that specific technical activities had been prioritised by the MCM (Fig. 5D).

The 27 Members which had established an MCM for zoonosis and food safety issues were asked whether they held meetings with and among partner organisations and stakeholders on a regular basis. It was revealed that the national MCM in 21 of the 27 (78%) Members held regular meetings (Fig. 6A). For the remaining six (22%) Members, meetings of the national MCM were held on an ad hoc basis.

Members where the national MCM held regular meetings were further asked about the frequency of meetings. Regular meetings were held 'more than six times a year' by three (11%) Members, 'between two and five times' a year in 15 Members (56%) and 'once a year' in three (11%) (Fig. 6B).

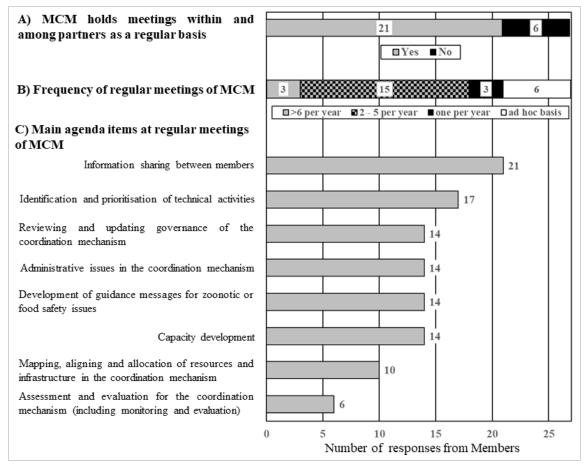


Fig. 6. Regular meetings of multisectoral coordination mechanisms. Valid responses obtained from 27 Members are accounted for in each element or question. MCM: multisectoral coordination mechanism

The 21 Members in which the national MCM held regular meetings for control of zoonosis and food safety issues were then asked to list the main agenda items. 'Information sharing' between members was implemented in all the 21 Members. Following that, 'identification and prioritisation of technical activities' (17 responses, 81%), 'reviewing and updating governance' (14 responses, 67%), 'administrative issues' (14 responses, 67%), 'development of guidance messages for zoonotic and food safety issues' (14 responses, 67%) and 'capacity development' (14 responses, 67%) showed relatively high frequencies. Though the percentages are less than 50%, 'mapping, aligning and allocation of resources and infrastructure' (ten responses, 48%) and 'assessment and evaluation for the coordination mechanism' (six responses, 29%) were also reported as agenda items. For one Member, 'outbreak and case reports' was also on the agenda at regular meetings.

3. Discussion

Health issues at the human-animal-ecosystems interface cannot be effectively addressed and controlled by one sector or by multisectoral collaboration without formal agreements. Collaboration across all relevant sectors and disciplines is required to address zoonosis and food safety issues. An MCM is regarded as the formalised group that acts to strengthen or develop collaboration, communication and coordination across several sectors in charge of addressing zoonosis and food safety issues at the human-animal-environmental interface.

In the questionnaire study from the 8th Asia-Pacific Workshop on Multi-sectoral Collaboration at the Animal-Human-Ecosystem Interface, a total of 28 Members provided response. Responses were provided by multi-sectors in 19 (68%) of the 28 Members, whereas the responses in eight (29%) and one (4%) Members were from animal and public health sector, respectively. A National One Health coordination mechanism was reported in 24 of the 28 (86%) Members. This proportion is close to the results of the questionnaire survey in the similar Workshop held in 2015, where at the time, 20 of 23 Member indicated they already had a National One Health Coordination Mechanism.

Seventeen (61%) Members responded that they achieved resource mobilisation. Sixteen (57%) Members responded that they developed a One Health coordination mechanism at the subnational level. Members were asked about major gaps in addressing One Health. Nine (32%) responded that they had the major gap in funding, and this proportion is similar to the results of the questionnaire in 2015 (7/23 Members, 30%). Sixteen (57%) Members responded that they held a stakeholder meeting more than three times per year, and nine (32%) responded that they held it either one or twice a year.

3.1. Establishment of an MCM

Twenty-seven of the 32 (84%) Members responded that they had established an MCM in their national government. A similar result was obtained from the questionnaire study conducted via the 8th Asia-Pacific Workshop on Multi-sectoral Collaboration at the Animal-Human-Ecosystem Interface, where a national One Health coordination mechanism was reported in 24 of 28 (86%) responding Members. Comparing this latest questionnaire with results from the previous study, the proportion of MCMs has not increased and fundamental difficulties for their establishment could not be solved by these Members. Key functions for establishing an MCM are illustrated in the TZG. Agreement on the need for an MCM is mainly triggered by weak responses to a zoonotic or food safety event or the identification of a gap in coordination capacity by external assessments such as those using the JEE and PVS Tools. Identification of necessary subgroups focusing on a particular activity or function more specifically, whether internal or external, may allow an MCM to obtain technical expertise from them.

Available infrastructure and resources should be identified prior to MCM establishment. In the present questionnaire study, nine Members (including four Members in which an MCM was successfully established) had not identified available resources for an MCM. Ensuring sustainable and equitable financing among all relevant sectors of an MCM is critical for ensuring continuous implementation for zoonosis and food safety issue control. Funding from the animal health sector for MCMs in these four Members was low (either 'some' or 'very little' funding), indicating that aligning the allocation of resources with strategic priorities is critical for the sustainability of specific activities in the control of zoonosis and food safety issues under MCMs.

3.2. Governance of MCMs and other operationalisation aspects of MCMs

The six representative elements of governance (See question three of the questionnaire) that should be agreed by members of the MCM are proposed in the TZG. In the present questionnaire study, these were overall well-achieved in Members, with agreement for 'leadership of the MCM' in 81%, and for 'basic working arrangement' in 78% of the MCMs. However, the number of elements achieved ranged widely. Five of the 27 Members had already reached agreement on all six elements, while four Members had reached agreement on two elements and three Members on only one element. Reviewing and updating the governance is necessary to ensure sustainability of an MCM.

In the present study, Members were asked about formal governance documents and description of operationalisation aspects of MCMs. Overall, formal governance documents were developed in Members with an MCM and covered operationalisation elements.

3.3. Key achievements in MCMs

TZG argues the benefits of establishing an MCM at the subnational level for Members with federalised or decentralised governments, which are geographically large, have a high population density or have a variety of zoonotic and food safety threats in different areas. In this questionnaire, 63% of Members had already established an MCM at the subnational level, which is a similar result to the previous questionnaire (57%, 16/28). Since decentralised government and/or establishment of an MCM at the subnational level before the national level was reported in 19 of the 20 Members, strong governance even at the subnational level rather than a variety of threats or characteristics of the area were more likely to influence the establishment of the MCM. On the other hand, seven of the ten Members without a subnational MCMs. Though some of the Members may not need to establish a subnational MCM – due to for instance, covering a small territory suffering limited types of threats or having an effective

In the present questionnaire, 63% of the Members had conducted a mapping analysis of the resources and infrastructure available in the government and from other sectors. This finding is similar to the previous questionnaire study where 61% (17/28) of Members responded that they could mobilise resources in the MCM. Though 11 Members achieved mapping of all three types of resource (financial, human and infrastructure), some members had difficulty in conducting mapping of financial and infrastructural resources. Most Members could achieve fund allocation for future cooperation and collaborations. However, ensuring full resource mobilisation under strategic priorities was made in fewer than half of the Members. This is a concern for sustainability of activities for zoonosis and food safety issues control, as resource mobilisation and funding allocation with strategic prioritisation is considered necessary to ensure effective use of finite resources. Another concern revealed in the present questionnaire study regarding resource mobilisation is sharing responsibility for coordination of funding between sectors. Members may ensure resource mobilisation or allocation of funds for activities of the MCM but affected sectors might not provide an equal contribution. To make activities required for the control of zoonosis and food safety issues under the MCM more functional, resource allocation after mapping should be considered in respect of strategic priorities with equal and equitable responsibility shared among affected sectors.

3.4. Key challenges faced in the inter-sectoral collaboration

In the present questionnaire study, activities relating to zoonosis or food safety issues conducted by animal health sectors in most Members were sponsored by the government, and nearly half were also sponsored by the private sector within the nation. Furthermore, in 17 of the 26 Members, more than 40% of the budget for activities in zoonosis or food safety issues were supported by national sources. Sustainable funding, such as financial resources available within the government or tax resources, would ensure continuity of activities for control of zoonosis and food safety issues. In that respect, the remaining nine Members may have difficulty in planning activities considering their unstable funding. In these nine Members, it was revealed that either 'some' or 'very little' funding came from the animal health sector for MCM activities. Given these results, funding is still a potential concern for MCMs with either unstable funding sources and/or with limited amounts of funding.

Self-monitoring and evaluation (SME) of function and impact is considered in the TZG as an essential element for an MCM. Among the 27 Members with the national MCM, about half had started SME based on their own guidelines. SME is a useful tool to identify gaps between plans and implementation and to improve control of MCM activities for zoonosis and food safety issues including technical MCM activities. The Members should consider the implementation of SME and the development of an SME scheme referring to comprehensive guidelines such as the TZG.

3.5. Key priority activities to further strengthen multisectoral collaboration

In the present questionnaire study, most of the Members with an MCM had already identified specific technical activities for more effective control of zoonosis or food safety issues. Though the response rates for each activity were different from the results of the previous questionnaire, activities with the highest frequency responses were similar – such as surveillance systems, regulations or guidelines for emergency preparedness. In summary, critical specific technical activities vary among Members, and support for the Members should be adjusted accordingly to optimise them. Moreover, specific activities identified were mostly prioritised by the MCM to effectively utilise resources.

Members were asked about the frequency of regular meetings of the national MCM. In the present questionnaire, two-thirds of the Members with an MCM had regular meetings more than twice per year. This results match those of the previous study. Regarding agendas of MCM meetings, most items relating to governance, function, guidelines and administrative issues were addressed by most of the Members, indicating that a fundamental role of the meetings is to review and update the MCM function.

Conclusions

Though many Members achieved the establishment of an MCM at the national level, the results of the present and the previous questionnaire in April 2019, as well as the similar questionnaire carried out in 2015, the proportion of such Members has not changed in recent years. This indicates that inherent difficulties might be present in the region, hampering the establishment of an MCM. Identification of infrastructure and resources are required for the establishment of an MCM. Resource mapping is needed for Members with low funding proportions from animal health sectors to MCMs as well as for Members with no current MCM.

Agreement on governance elements with MCM members and description of the operationalisation aspects of an MCM were generally achieved in most Members. However, all the elements of governance proposed in the TZG were agreed in a limited number of Members. Reviewing and updating governance of MCMs is essential to make them more effective.

Establishment of an MCM at the subnational level has been achieved in 63% of the Members due to decentralisation of the government or retention of an original MCM at the subnational level. However, 70% of Members with a national MCM but no subnational MCM do not have plans to establish subnational MCMs.

Resource mapping analysis for aligning the allocation of resources with strategic priorities has been implemented by the MCM in 63% of cases. Furthermore, mapping of all infrastructural, human and financial resources has been conducted by 41% of Members. However, full resource mobilisation under strategic prioritisation, or equal and equitable responsibility for MCM funding were ensured only in a limited number of Members.

Though activities for zoonosis or food safety issues in animal health sectors were mainly sponsored by national funding in most Members, animal health sectors in 28% of Members supported less than 40% of the activities using national funding. Unstable funding from overseas organisations is a critical challenge for MCMs. Monitoring and evaluation systems should be used to assess the efficacy of technical activities and aid selection of activities and resources used for their implementation. However, the SME system has been established in less than half of the Members with an MCM; development of an SME framework is also required at the regional level.

Among members of the MCM, key activities were prioritised and resources for their implementation were identified (mostly estimated) although the contents of the activities were wide-ranging. Holding regular meetings with high frequency is a key priority activity to further strengthen MCMs.

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