

Implementing National Antibiotic Action Plans for Reducing Antibiotic Resistant Bacteria in Animals

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Abstract

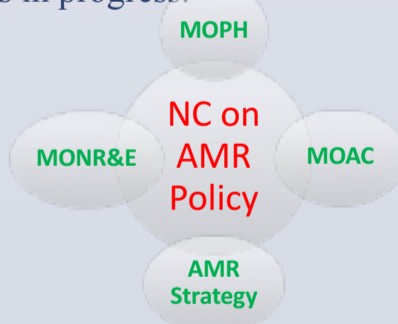
One Health approaches to combating antimicrobial resistant (AMR) bacteria require cooperation among the human, animal and environmental sectors. WHO, OIE and FAO have Action Plans designed to assign tasks for implementation within each country. For animal agriculture, the OIE and FAO strategy includes: AMR awareness, surveillance of antibiotic use and AMR bacteria, responsible use and good practice guidelines, governance, capacity building and international standards implementation as key activities. Adapting these high-level global approaches to fit within national settings presents many challenges. These include insufficient political support, limited funding, infrastructure challenges, negative economic impact of actions on small holders, technical capacity, shortages of trained animal health professionals, laboratory personnel and many other issues. A key learning from Europe is that a national alliance of key stakeholder groups can be an effective means to provide coordination, communication and collaboration for implementation down to the farm level. An example is the Responsible Use of Medicines in Agriculture (RUMA) alliance in the United Kingdom (<http://www.ruma.org.uk>) and at the European country level, the European Platform for Responsible Use of Medicines in Animals (<http://www.epruma.eu>) is also operational. Formation of similar in-country national alliances or even regional alliances of key stakeholder groups in the Asia-Pacific region could offer the potential for leveraging resources, shared learning and international cooperation. Governance, capacity building, surveillance and other national level actions could be blended with the practical aspects of on-farm implementation of good animal practices/antibiotic use guidelines, training of personnel and ways to maintain profitability for small-holder farms. In short, identification of progress or barriers in reducing AMR within countries might be enhanced by formation of stakeholder alliance organizations as has been done in Europe.

Introduction

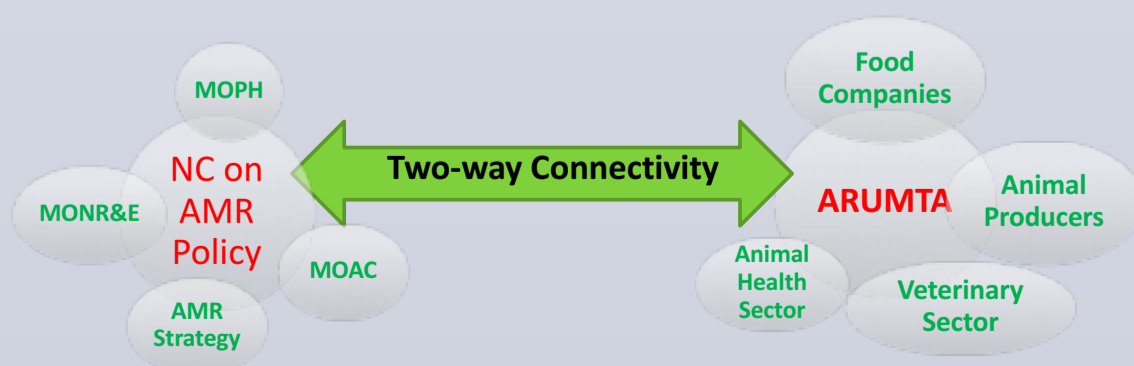
Implementation of national recommendations on appropriate use of antibiotics in food animals has been identified as the next challenge. The key role of stakeholder associations to do the “field” level work of translating the recommendations into actions, while maintaining business continuity, animal health and welfare has been recognized. For example, professional associations of veterinarians have developed clinical practice guidelines based on responsible antibiotic use principles and animal health companies have provided educational workshops for producers and others. However well-intentioned each sector’s actions may be, the potential for counter-productive actions that may work against each other remains. One approach to overcoming this situation is to explore the approach taken in the United Kingdom where an alliance of associations was formed. The Responsible Use of Medicines in Agriculture alliance offers a successful example of what can be achieved for animal agriculture when associations are coordinated and work together in conjunction with government agencies.

Thailand Non-governmental Sector Implementation of NSP

Thailand government agencies have been proactive in drafting the National Strategic Plan (NSP) for combating antimicrobial resistance. A multi-sectorial National Health Assembly engaged public sectors and government agencies to adopt an AMR resolution in 2015. The policy-driven approach resulted in the finalized NSP for 2017-2021. Governance is by the National Committee on AMR policy, chaired by a Deputy Prime Minister and three subcommittees (AMR Strategy led by Public Health Minister, sub-committee on human health and AMR led by MOPH and Sub-committee on animal health, agriculture and food led by MOAC) collectively referred to as the Multi-sectorial Coordinating Group. Outreach to the Ministry of Natural Resources and Environmental (MONR&E) is in progress.



The NSP has five strategic approaches. For discussion purposes, Strategy #4, AMR prevention and antimicrobial stewardship in agriculture and pets is highlighted, but others are relevant to the situation with regards to awareness, One Health, and evaluations. A stakeholder mapping plan was completed for government agency responsibilities matched to each of the five NSP strategies. However, a similar mapping with stakeholder associations does not appear to have been done. Thus, with the stated need for public-sector participation to be coordinated with the government agency approaches, and in keeping with the governance structure to accommodate a single point of contact, it would appear that an alliance of associations in the agricultural sector would close a gap in connectivity and provide a productive path forward.



RUMA and ARUMTA

Responsible Use of Medicines in Agriculture (excerpts from RUMA website)

- RUMA was established in November 1997 to promote the highest standards of food safety, animal health and animal welfare in the British livestock industry.
- It is a unique, independent non-profit group involving organisations that represent all stages of the food chain from ‘farm to fork’. This reflects the importance of traceability, transparency and accountability at all stages in the chain: from primary food production, through processing, manufacturing and retailing to the final consumer. Its membership includes organisations representing interests in agriculture, veterinary practice, animal medicines industry, farm assurance, training, retailers, consumers and animal welfare interests.
- RUMA aims to produce a co-ordinated and integrated approach to best practice in animal medicine use. It has an established communications network with government departments and many non-governmental organisations.
- It is important for RUMA to maintain a high profile amongst farmers and vets, so that they can avail themselves of up to date, science based advice on best practice use of medicines, and policy makers (e.g. Defra and the Food Standards Agency), so that they are aware of this advice.

Alliance for the Responsible Use of Medicines in Thai Agriculture (ARUMTA) - Proposal

- ARUMTA is envisioned to mirror the RUMA organisation as above, while adapting it to meet cultural, business and government norms within Thailand.
- After becoming an official entity in Thailand, the leadership will undertake the following steps:
 - Establish a Scientific Group to provide impartial scientific advice to ARUMTA on all aspects of responsible use of medicines, particularly in relation to antimicrobial resistance (AMR) and antibiotic use in animals.
 - Develop a Communications Group to set a strategy to provide up to date information on the responsible use of medicines to farmers, veterinarians, consumers, policy makers and the media.
 - The Communications Group will develop and maintain an ARUMTA website to communicate on behalf of the alliance. It would likely feature fact sheets, position statements, progress reports, meeting announcements, links to the associations in the alliance and other useful websites.
 - Partner with the Thai government’s National Committee on AMR Policy and the ministerial level leadership to implement the Thai NSP Strategy #4 by coordinating the work among its member associations and their constituents. Report progress by publishing an update annually.
 - Provide support to veterinary students, veterinarians and others directly involved in the use of medicines. Additionally, ARUMTA will work with farmers to increase and improve the training in good production practices and the responsible use of antibiotics.
 - Seek ways to improve workforce capability and capacity by partnering with NGOs such as USAID, FAO and others.
 - Other actions and objectives will follow as the organization expands.

Policy and Path Forward Recommendations



1. Draft a specific work proposal for ARUMTA tailored for Thailand, based on RUMA.
2. Obtain feedback and conceptual support from key influencer organizations, with potential for funding initial operational expenses
3. Convene stakeholder association meeting to share the proposal, seek commitment for participation and outline organizational / administrative path forward, outline initial Work Program and timeline
4. Obtain necessary legal documents, organizational structure, draft charter and bylaws, select officers, financial arrangements, location (office), communication tools, etc.

Acknowledgments and Author Contact

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