REPORT of the Thirty-seventh Session of the Animal Production and Health Commission for Asia and the Pacific (APHCA)

Thimphu, Bhutan, 22-26 September 2013



## THE EIGHTEEN APHCA MEMBER COUNTRIES

AUSTRALIA MONGOLIA

BANGLADESH MYANMAR

BHUTAN NEPAL

INDIA PAKISTAN

INDONESIA PAPUA NEW GUINEA

IRAN PHILIPPINES

DPR KOREA SAMOA

LAO PDR SRI LANKA

MALAYSIA THAILAND



# Report of the

THIRTY-SEVENTH SESSION OF THE ANIMAL PRODUCTION AND HEALTH COMMISSION FOR ASIA AND THE PACIFIC (APHCA)

Thimphu, Bhutan, 22-26 September 2013

The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations (FAO) concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The mention of specific companies or products of manufacturers, whether or not these have been patented, does not imply that these have been endorsed or recommended by FAO in preference to others of a similar nature that are not mentioned.

The views expressed in this information product are those of the author(s) and do not necessarily reflect the views or policies of FAO.

ISBN 978-92-5-107980-5 (print) E-ISBN 978-92-5-107981-2 (PDF)

© FAO, 2013

FAO encourages the use, reproduction and dissemination of material in this information product. Except where otherwise indicated, material may be copied, downloaded and printed for private study, research and teaching purposes, or for use in non-commercial products or services, provided that appropriate acknowledgement of FAO as the source and copyright holder is given and that FAO's endorsement of users' views, products or services is not implied in any way.

All requests for translation and adaptation rights, and for resale and other commercial use rights should be made via www.fao.org/contact-us/licencerequest or addressed to copyright@fao.org.

FAO information products are available on the FAO website (www.fao.org/publications) and can be purchased through publications-sales@fao.org.

For a copy of the report and correspondence, please contact:

Senior Animal Production and Health Officer and Secretary of APHCA FAO Regional Office for Asia and the Pacific (RAP) 39 Maliwan Mansion, Phra Atit Road Bangkok 10200, THAILAND

E-mail: Joachim.Otte@fao.org

FAO Homepage: http://www.fao.org APHCA Homepage: http://www.aphca.org

## **Table of Contents**

	Page
RECOMMENDATIONS	v
Minutes of the $74^{th}$ Executive Committee Meeting and the $37^{th}$ Session of	
APHCA	
The 74th Executive Committee Meeting	
The 37 <sup>th</sup> APHCA Session	4
Timetable and Agenda (APHCA 2013/01)	19
Timetable	19
Provisional Agenda	20
Provisional Workshop Programme	21
Dates and Venues (Host Countries) of APHCA Sessions (APHCA 2013/02)	23
Minutes of the $73^{ m rd}$ Executive Committee Meeting and the $36^{ m th}$ APHCA Ses	
(APHCA 2013/03)	28
The 73 <sup>rd</sup> Executive Committee Meeting	28
The 36th APHCA Session	30
Summary Statement of APHCA Account (APHCA 2013/04)	38
Cash Balance as of 1 January 2013	38
Expenditures in 2012	38
Status of Contributions	39
Approved Budget for 2013 and Expenditures to 31.08.2013	40
Scale of Contributions for 2013	41
Activity Report (APHCA 2013/05)	42
Introduction	
Personnel (RAP Livestock Group)	42
Field Projects Supported by RAP Livestock Group	
Meetings, Workshops and Events (Co-)Organized	
Congresses, Symposia, Meetings and Workshops Attended	
Commissioned Studies	
Publications (hard copy)	48
Smallholder Dairy Development Activities	
Animal and Veterinary Public Health Activities	
AMU and AMR in the Asia-Pacific Region	

National Feed Assessments	55
Support to the Agenda of Action for Sustainable Livestock Sector Development	59
APHCA Information Unit	
Livestock Sector Policy Capacity	61
Work Planned up to End 2013	
Decision Items and Proposed Budget for 2014 (APHCA 2012/06)	65
Scale of Contributions	
Membership of Secretariat of Pacific Countries (SPC)	66
Proposed APHCA Trust Fund Budget for 2014	
List of Participants (APHCA 2013/07)	
Country Reports	71
Australia	71
Bangladesh	83
Bhutan	88
India	93
Indonesia	96
Lao PDR	100
Malaysia	106
Myanmar	108
Pakistan	112
Papua New Guinea	117
Philippines	119
Samoa	125
Sri Lanka	128
Thailand	131
Speeches	133
Welcome by Offg. Director, Department of Livestock	133
Welcome Address by FAO	
Opening Address by the Guest of Honour	137
Vote of thanks	
Closing Remarks	140

### RECOMMENDATIONS

#### The Commission welcomes:

- FAO's ongoing process of decentralization towards a more flexible and innovative decentralized office network;
- FAO's renewed emphasis on South-South cooperation and participatory consultative processes;
- That the Regional Technical Commissions are considered the Regional prioritysetting bodies for the sub-sectors for which they are competent and that their recommendations complement and inform the discussions during the Asia-Pacific Regional Conference on the Programme of Work and the Regional Priority Framework.

#### The Commission emphasizes that:

- Seventy percent of the world's poor livestock keepers and 40 percent of the global livestock population reside in the Asia-Pacific Region;
- More than 25 percent of the children in the region suffer from under-nutrition;
- The livestock sector is undergoing exceptionally rapid and significant growth and transformation.

With respect to developments in the Asia-Pacific Region, the Commission is concerned about the:

- Rising regional shortfalls in animal feed and its impact on food security;
- Significant impact of animal diseases on livestock production and trade of animal products;
- Sustained emergence of infectious diseases affecting humans and animals;
- High human burden of endemic zoonotic and food-borne diseases;
- High and rising prevalence of antimicrobial resistance in livestock-associated microorganisms;
- Growing pressure on natural resources (land, water and nutrients) and environmental impact of rapidly growing livestock production;
- Likely effects of climate change including increasing frequency of severe weather events (e.g. droughts, floods) on livestock production and health;
- Exclusion of smallholder livestock keepers from growing markets for high-value agricultural products;
- Inadequate capacity among the member countries in analyzing trade-offs and implementing specific measures to support more sustainable livestock sector development.

With respect to FAO's and the Commission's capacity to support Member countries to address the above issues, the Commission notes that:

- Human and financial resources made available to the Regional Office seem incommensurate with the Office's increase in responsibilities following 'decentralization';
- Arrears of APHCA Member countries have steadily increased over the past three years.

#### The Commission recommends that FAO:

- Increases the human and financial resources allocated to address the multiple problems associated with the rapidly growing and transforming livestock sector;
- Enhances livestock sector policy analysis, formulation and implementation capacity of member countries in the region;
- Continues to support regional initiatives and actions to address problems of transboundary nature (e.g. emerging diseases, feed scarcity, zoonoses, antimicrobial resistance), in close collaboration with related agencies and intergovernmental organizations;
- Promotes within- and cross-country collaboration so as to encourage stakeholder action and investment towards the broader goal of sustainable livestock production;
- Promotes and supports national mechanisms of prioritization of livestock production and health activities;
- Amends the APHCA Agreement to open membership to intergovernmental organizations within the APHCA region.

#### The Commission welcomes:

- The Secretariat of the Pacific Community (SPC) as member of APHCA with specific functions of representing and providing services to the other countries in the Pacific, that are not members of APHCA;
- Applications for Membership from countries and intergovernmental organizations in the APHCA region;
- Extra contributions to the Commission's Trust Fund or to the member countries' National Currency Funds (the latter for TCDC activities in particular).

## Minutes of the 74<sup>th</sup> Executive Committee Meeting and the 37<sup>th</sup> Session of APHCA

## The 74th Executive Committee Meeting

#### Sunday, 22 September 2013, 15:00 to 16:50 hours

- ➤ The meeting was chaired by Dr W.K. de Silva, delegate from Sri Lanka. Present were the delegates from Australia, Bhutan (Vice Chairperson), Myanmar, Samoa and The Philippines. The meeting was furthermore attended by members of the APHCA Secretariat.
- > The Chairperson welcomed the delegates, commended APHCA for its steadfastness and instrumental activities in support of member countries and thanked Bhutan for hosting the Session.
- ➤ The APHCA Secretary welcomed the delegates and expressed his appreciation for their presence. He informed that all APHCA member countries, with the exception of DPR Korea, had accepted the invitation. Unfortunately, the delegate from Mongolia was prevented from attending due to other commitments while the delegates from Iran and Nepal were not able to finalize their travel arrangements in time. The Session would thus be attended by delegates of 14 of the 18 member countries
- ➤ The APHCA Secretary informed the ExCom that Dr K. Cokanasiga, Adviser, Animal Health and Production Land Resources Division, Secretariat of the Pacific Community, Dr H. Kugita, Regional Representative, OIE Representation for Asia and the Pacific and Dr T Ishibashi, Deputy Regional Representative, OIE Representation for Asia and the Pacific would attend the Session as observers. Furthermore, 10 observers from government of Bhutan offices would attend the session and workshop.
- ➤ The ExCom reviewed and adopted the agenda of the 37<sup>th</sup> Session and associated, OIE co-funded, regional workshop on zoonoses, food-borne diseases and antimicrobial resistance (AMR) in the Asia-Pacific Region.
- ➤ The ExCom reviewed and approved the minutes of the 73<sup>rd</sup> Executive Committee Meeting and 36<sup>th</sup> Session.
- ➤ The APHCA Secretary reported on the financial situation of the Commission. At the beginning of 2013 (01.01.2013), the cash balance in the APHCA Trust Fund stood at US\$260 810 plus US\$90 850 of cumulative interest earned. A budget revision has been carried out and the earned interest has been transferred into the cash balance. Contributions received for 2013 up to 31 August amount to US\$40 766.86 (outstanding 2013 contributions total US\$49 775.14). Overall the financial situation

- of APHCA has remained stable over the past years with the cash balance fluctuating between US\$200 000 and US\$300 000.
- ➤ The ExCom noted with disappointment that Bangladesh had still not reduced its considerable arrears and that some other countries were also accumulating arrears, which at the end of 2012 totaled US\$59 551.01 and urged the next Chairperson to take the matter up once again with the Bangladesh and other counterparts.
- The APHCA Secretary provided a brief summary of activities carried out since the last meeting in Negombo, Sri Lanka. Activities of FAO-RAP Livestock Group staff encompassed technical support to more than 30 projects, organization of symposia, meetings, workshops and other events as well as representation of FAO and APHCA at events organized by other organizations. The main activities carried out in relation to the APHCA workplan for 2013 were the organization of an APHCA Expert Meeting 'Towards Standardization and Harmonization of Monitoring of AMU in Livestock and AMR in Livestock-associated Micro-organisms in the Asia-Pacific Region', a Regional Workshop on 'Animal Feed Resources and their Management in the Asia-Pacific Region', continuation of work linked to the smallholder dairy development programme, co-organization of the 4<sup>th</sup> Sustainable Animal Agriculture Development Conference (2013 SAADC), held in Lanzhou, China, and ongoing activities to enhance information dissemination and visibility carried out by the Information Unit. The 4<sup>th</sup> FAO-APHCA/OIE Regional Workshop on Brucellosis Diagnosis and Control in the Asia-Pacific Region (Proficiency Test and Ways Forward) is planned for December 2013.
- The livestock policy officer, leading the smallholder dairy development activities of FAO and APHCA in the region requested APHCA to endorse the dairy training center established in Chiang Mai, Thailand, under the CFC dairy project as 'regional APHCA dairy training centre'. This would encourage Thai Dairy Promotion Organization to provide funds to upgrade the center through the Thai NCF. A business plan to ensure financial sustainability of the centre would be developed using APHCA TF funds allocated to smallholder dairy development. The ExCom agreed to the request and suggested a close link to be established between the dairy training center and the animal nutrition centre also located in Chiang Mai.
- Given some under-spending to be expected in 2013 vis-à-vis the proposed budget, the Secretary requested permission to carry-over unspent 2013 allocations into 2014 to carry complete activities planned for 2013 (as was agreed at the 36<sup>th</sup> Session for 2013).
- ➤ The APHCA Secretary provided a brief outlook on thematic areas APHCA might consider to systematically address in the coming years. These thematic areas comprise:
  - a. Continued attention to *smallholder dairy development* as an important 'tool' for poverty reduction and rural development.
  - b. Further and refined assessments of the burden and impact of zoonoses, foodborne diseases and antimicrobial resistance, building on intensified

- collaboration with OIE and WHO, to support decision making on resource allocation of national health systems. In this context, standardization and harmonization of veterinary AMR assessments across APHCA countries would be an important step to obtain a more reliable overview of the true extent of the problem.
- c. Given the rising cost of animal feed and the soaring feed import bill of many APHCA countries, the establishment national *feed resource assessment systems* would be useful for providing some guidance to livestock sector development. Establishment of a common approach for feed resource assessment across interested countries, drawing on national and international expertise, is an area for APHCA engagement as expressed by the national feed experts attending the feed assessment workshop.
- d. In view of the multiple and complex challenges facing public sector agencies in guiding livestock sector development on a path to a sustainable role in food security and equitable economic development in an increasingly resourceconstrained, urbanizing and affluent world, there is a need for *capacity building* in livestock sector policy analysis, design and negotiation across countries at various levels of administration.
- At the 36<sup>th</sup> Session, the Secretariat was requested to review the scale of contributions (which has been unchanged since 2003) in accordance with the original criteria used for their establishment, maintaining 3 categories and phasing of the increment over successive years. The Secretariat's proposal for a raise in the level of contributions to the 2012 US\$ purchasing power equivalent of the 2003 scale of contributions in two steps (2014 and 2015) was endorsed by the ExCom.
- > The ExCom requested the Secretariat to ask FAO HQ to issue the annual call for funds in the first quarter of the calendar year and urged the Secretariat to continue its practice of copying the call for funds to the national delegate.
- ➤ The ExCom discussed the request for APHCA membership by the Secretariat of the Pacific Community (SPC). The Secretary pointed out that a positive decision would require a slight modification of Article III, para 1, defining eligibility for membership, to broaden the latter to include intergovernmental organisations within the 'Region'. The ExCom was unanimously in favour of granting APHCA membership to SPC and suggested that SPC and other intergovernmental organizations in the region should fall into contribution band A.
- ➤ The proposed APHCA workplan and budget for 2014 amounts to US\$135 000 for six thematic thrusts: (i) smallholder dairy development US\$25 000 (ii) zoonoses and food safety US\$20 000 (iii) feed resource management US\$20,000 (iv) AMR Risk management US\$20 000 (v) livestock policy capacity development US\$20 000 and (vi) information dissemination and APHCA positioning US\$30 000. FAO's anticipated contributions to the workplan are estimated at US\$135 000.
- The Chairperson closed the meeting at 17:50

### The 37th APHCA Session

#### Monday, 23 September 2013

- ➤ Opening: The opening of the 37<sup>th</sup> APHCA Session was presided over by H.E. Lyonpo Yeshey Dorji, Minister, Ministry of Agriculture and Forestry. Delegates from 14 member countries (Australia, Bangladesh, Bhutan, India, Indonesia, Iran, Lao PDR, Malaysia, Myanmar, Pakistan, Philippines, Samoa, Sri Lanka, and Thailand) and observers from the OIE Regional Representation for Asia and the Pacific, Tokyo, and the Secretariat of the Pacific Community (SPC) attended the Session.
- > Adoption of the Agenda: The Agenda was adopted.
- ➤ Election of the Chairperson and Members of the Executive Committee: The Executive Committee was elected as follows:

Chairperson: Bhutan Vice-chairperson: Thailand

Members: Indonesia, Pakistan and Papua New Guinea

Ex-officio member: Sri Lanka

The outgoing Chairperson, Dr W.K. de Silva, thanked the delegates for their support and handed over the chairmanship of the Session to Dr T. Dorji, Director General a.i., Department of Livestock, MoAF, Bhutan.

- ➤ Approval of the Minutes of the 73<sup>rd</sup> Executive Committee Meeting and the 36<sup>th</sup> APHCA Session: The Minutes were reviewed and approved by the delegates.
- > Statement of Accounts: The Secretary presented the status of the APHCA accounts for 2012 and expenditures for 2013. The approved budget for 2012 was US\$100 000 while the 2012 expenditures amounted to US\$38 125 (APHCA 2013/04). The reason for this under-spending have primarily been recoveries on the salary of the APHCA IT clerk, who had been seconded to other units in FAO RAP in 2011 and had so far not reimbursed APHCA for the salary outlays.

Overall, over the past three to four years, APHCA's cash balance has fluctuated between US\$200 000 and US\$300 000. At the beginning of 2013 (01.01.2013), the cash balance in the APHCA Trust Fund stood at US\$260 810 plus US\$90 850 of cumulative interest earned. A budget revision has been carried out and the earned interest has been transferred into the cash account at disposal for APHCA activities.

Delegates took note of and approved the statement of accounts for the year 2013.

Contributions received for 2013 so far (31.08.2013) amount to US\$40 766.86 (outstanding 2013 contributions total US\$49 775.14). Cumulative outstanding contributions total US\$105 041.15, nearly 40 percent of which is accounted for by Bangladesh. Expenditures in 2013 are likely to be slightly below the approved budget due to higher than expected co-funding of activities from other sources. The

Secretary requested permission by the member countries to utilize unspent 2013 funds for completion of approved 2013 activities in 2014, to which no objections were raised.

Delegates requested the Chairperson and Secretariat to (i) officially take up the issue of arrears with the respective counterparts and (ii) to invite more countries and intergovernmental organizations in the region to join APHCA.

Delegates furthermore requested the Secretariat to ask FAO-HQ to issue the annual call for funds in the first quarter of a calendar year so as to allow more flexibility in the timing of payment. They also urged the Secretariat to continue its practice of copying the call for funds, usually addressed to the Ministry of Finance, to the national delegate.

Overview of Activities: The Secretary presented the activities conducted by APHCA and the RAP livestock group (RAP-LG) solely or in collaboration with other groups, irrespective of sources of funding and not limited to APHCA Member countries (APHCA 2013/05).

Since the last Session, the RAP livestock group has been involved in the implementation of 38 country-specific as well as sub-regional (e.g. SAARC, ASEAN, Greater Mekong Sub-Region) projects with animal health and / or animal production components (up from 21 projects in the 2011/12 period). About half of the projects are financed by FAO through its Technical Cooperation Programme (TCP) while the remaining half receive funding from other national or international agencies through uni- or multilateral donor trust funds.

Partly in conjunction with but also in addition to engagement in project implementation staff of the RAP-LG have (co-)organized 13 meetings, workshops and other events. Two FAO-APHCA workshops were organized in the reporting period, namely the FAO-APHCA Expert Workshop 'Towards Standardization and Harmonization of Monitoring of AMU in Livestock and AMR in Livestock-associated Micro-organisms in the Asia-Pacific Region' held in Bangkok in May 2013 and the Regional Workshop on 'Animal Feed Resources and their Management in the Asia-Pacific Region', held in Bangkok in August 2013. Furthermore, FAO-APHCA strongly contributed to the organization and implementation of the 'Waste to Worth' workshop held under the overall auspices of the Agenda of Action for Sustainable Livestock Development. In addition, as part of the smallholder dairy development thrust, RAP-LG co-organized the Thailand Celebration of World Milk Day.

In the reporting period, RAP-LG staff attended 16 congresses, symposia, meetings or workshops to (re)present FAO/APHCA and to provide technical expertise. FAO-RAP co-funded the organization of the 4<sup>th</sup> International Conference on Sustainable Animal Agriculture for Developing Countries (SAADC) held in Lanzhou, China, in July 2013.

In line with the Vision of APHCA to establish itself as a prime source of information, knowledge, expertise and experience on all aspects of livestock sector development

in the Asia-Pacific region formulated at the APHCA Strategy Workshop, the Information Unit has devoted considerable time to further improving the APHCA website. Close to 400 news items, 80 videos and 50 documents have been uploaded since the 36<sup>th</sup> Session. Nearly 280 000 visits have been recorded in the 11 month period with close to 84 000 document downloads. The site is currently ranked among the top 15% of more than 30 million sites monitored by <a href="https://www.webstats.com">www.webstats.com</a>.

Finally, RAP-LG have commissioned a number of studies in various countries in the region on topics such as fodder resources, livestock sector developments and food security, livestock and livestock product trade, patterns of livestock product consumption, swine disease emergence, antimicrobial resistance etc. Some of these studies are carried out as part of the projects implemented by RAP-LG while others have been commissioned as part of FAO's Regular Programme.

**Smallholder Dairy Network Activities**: The Livestock Policy Officer, Dr V. Ahuja, presented a brief overview of the smallholder dairy activities in Asia and the Pacific Region comprising the three regional dairy development interventions:

- Smallholder Dairy Development in Bangladesh, Myanmar and Thailand: Improving the Bargaining Power and Sustainable Livelihoods through the Enhancement of Productivity and Market Access in Dairy (MTF/RAS/CFC/259)
- Enhancing Milk Consumption and Livelihoods through School Milk Programmes Linked to Smallholder Dairy Operations (TCP/RAS/3309 (D), and
- A third supporting intervention, the 'Asia Dairy Network' funded by APHCA

The overall objective of these interventions is to improve the bargaining power and livelihoods sustainability of smallholder milk producers in participating countries. This objective is to be realized through the attainment of the following main outputs:

- A sustainable 20% improvement in milk productivity and the substitution of dairy imports with improved locally produced milk and dairy products;
- Improved market access for 5 000 smallholder milk producers;
- Improved milk quality in terms of hygiene, fat content, bacteria and TB negative animals;
- Introduction of new technologies for milk processing;
- Strengthened skills and capacity to develop and implement intervention strategies, which are tailored to introduce or expand school milk programmes in rural areas;
- Establishment of an Asian Dairy Network to represent the interests of the smallholder dairy sector in Asia;
- Expanding the remit of the Chiang Mai Dairy Training Centre, currently focussed primarily on national training needs, to a Regional Dairy Training Centre.

A recent mid-term review of the projects concluded that they have made good progress in implementing the activities planned for implementation so far. During the first two years the implementing teams focused on (i) mobilisation, planning, coordination and awareness raising; (ii) coaching and mentoring the three country teams; and (iii) priority field activities. As a result there is compelling evidence of strong ownership of project activities across all three countries along the entire dairy value chain. In terms of achievements to date, the project highlights include launch of school milk activities in Myanmar and Bangladesh, a well coordinated dairy extension programme in Thailand, introduction of Napier Packchong 1 forage variety in the three countries, dairy farmer trainings and introduction of quality control and improvement systems.

The Asia Dairy Network was launched in a symposium as part of the AAAP Congress in Bangkok in November 2012. Since then the network membership has grown to exceed 200 members. A network coordinator has been appointed, a new website launched and a listserv created for wider communication. An electronic conference is now planned later this year under the auspices of Asia Dairy Network.

As per project plan, the Dairy Training Centre in Chiang Mai has been upgraded. The centre has the capacity to offer training in (i) milk pasteurization, (ii) milk packaging, (iii) drinking yoghurt, ice cream, butter and cheese making, and (iv) milk quality testing and management.

It was proposed that APHCA consider recognizing the Chiang Mai Dairy Training Centre as a Regional Dairy Training Centre that can cater to the training needs of other interested countries in the region. In addition to meeting the growing regional needs, this would also facilitate resource mobilization through APHCA financial mechanisms.

Delegates were favorable to the proposal and endorsed, in principle, the Chiang Mai Dairy Training Centre as a Regional Dairy Training Centre. At the same time, however, the delegates requested the Secretariat to develop (i) a plan of activities / services the regional dairy training center would conduct / provide and (ii) a business plan to ensure long-term financial sustainability of the centre.

▶ RAP Animal Health Activities: The Animal Health Officer, Dr C. Benigno, presented a brief overview of the animal health activities conducted in the past year. The presentation focused on activities under four functional thrusts, namely: capacity building, information sharing, field support and coordination. Capacity building activities were designed to strengthen skills on outbreak investigation, field surveillance, laboratory capacity and use of GIS for animal health planning. Publications on swine health management and guidance documents for H7N9 were also released and shared amongst countries. Field projects on disease specific problems but covering the four functional areas are in place to support individual countries. FAO coordinates closely with partners like the OIE, WHO and regional specialized organizations such as ASEAN, SAARC and SPC to achieve synergies in animal health activities.

APHCA, in collaboration with the OIE Regional Representation for Asia and the Pacific, is continuing to invest in regional capacity building for brucellosis diagnosis. The meeting was informed of the upcoming workshop (December 2013) to discuss the proficiency testing results involving 17 laboratories in the region, carried out under the technical responsibility of the brucellosis laboratory of NIAH Thailand. (The latter completed the OIE twinning programme with ANSES, the OIE and FAO World Reference Laboratory for brucellosis.)

Agenda of Action for Sustainable Livestock Sector Development: The Livestock Policy Officer, Dr V. Ahuja, presented a brief overview of the background, history and the current status of Global Agenda of Action for Sustainable Livestock (GAA). He highlighted that growing resource scarcity has tremendous implications for livestock production in the region and that it is imperative that the sector stakeholders embrace the principle of sustainability in all their actions.

APHCA has been an active partner in shaping the GAA and APHCA Chairpersons have participated in the previous two Multi Stakeholder Platform (MSP) meetings. Dr Ahuja recommended that this practice should continue to the extent possible and that APHCA should not only maintain but even seek to deepen its level of engagement so as to ensure the representation and contribution of regional concerns in the global action.

APHCA delegates endorsed continued engagement in the Agenda of Action as well as the proposal that the APHCA Chairman participate in the next MSP meeting, scheduled in Ottawa, Canada from October 13 to 19, 2013.

➤ Country Reports on Actions taken on AMR Management: Country delegates presented short overviews of national activities to contain the growing threat of antimicrobial resistance. The full country reports are available at the end of this document.

<u>Australia</u>: The Australian Antimicrobial Resistance Prevention and Containment (AMRPC) Steering Group was established in February 2013 to provide high-level governance and leadership on antimicrobial resistance (AMR). The steering group is jointly chaired by the Secretaries of the Department of Health and Ageing (DoHA) and the Department of Agriculture, Fisheries and Forestry (DAFF). The Australian Chief Medical Officer and Chief Veterinary Officer are also members. The group will also oversee the development of a comprehensive National AMR Prevention and Containment Strategy for Australia.

The steering group recently endorsed the overarching framework for the development of the AMR prevention and containment strategy. The key elements of the framework are: (i) Governance, (ii) Surveillance, (iii) Infection prevention and control, (iv) Regulation, (v) International engagement, (vi) Communication (which includes Education, Stakeholder engagement and Partnerships, and (vii) Research.

To develop the strategy, the steering group will consult widely with stakeholders. In July 2013, the Australian One Health AMR Colloquium was convened by the

Australian Commission on Safety Quality in Health Care (ACSQHC) to start this process. The colloquium brought together food animal, animal health and human health experts to discuss key 'One Health' priorities and strategies to address AMR in Australia, with particular reference to surveillance strategies, regulatory measures and the most significant zoonotic AMR risks. The outcomes of the colloquium are being used to assist DoHA and DAFF to identify gaps and set priorities for action, and to develop advice to the steering group on next steps.

<u>Bangladesh</u>: There has been little systematic study of AMR in animal isolates of bacteria with the exception of *Salmonella spp.* and *E. coli*. Available AMR information can be summarized as follows:

- *E. coli*: resistance is seen with tetracycline, aminoglycosides, sulphonamides and ampicillin;
- Salmonella spp.: resistant to tetracycline, sulphonamides and streptomycin;
- Campylobacter: isolates resistant to erythromycin, tetracycline are found;
- *Enterococci*: found to be resistant against vancomycin, macrolide-lincosamide streptogramin group (tylosin);
- Staphylococci and other non-enteric bacteria: antibiotic resistance is quite common.

The main factors contributing to AMR are (i) unregulated manufacture and dispensation of antimicrobials, (ii) use of antibiotics as growth promotants and (iii) truncated antimicrobial therapy.

Although Bangladesh has enhanced its capacity to address the problem in the livestock sector there are still some limitations in this context. Important interventions made by the government that could support AMR management are:

- Establishment of an epidemiological unit in DLS.
- Strengthening support services for disease surveillance and monitoring activities through development projects.
- Regular and frequent coordination meetings between animal and human health sectors.
- Coordinated approach in surveillance and monitoring of zoonoses under One-Health concept.
- Imminent enforcement of the Food Safety Act.
- Certification system for safe food of animal origin.

Bhutan: A high level committee meeting on Antimicrobial Resistance and Antibiotic control in Bhutan was conducted recently. The committee, involving all the relevant stakeholders, developed a consensus that the existing Drug Technical Advisory Committee (DTAC), which acts as an advisory body to the Bhutan Medicine Board, will shoulder the additional responsibilities of National Steering Committee on Antimicrobial Resistance. The DTAC will include the role of the National steering committee on AMR as one of their mandates. The National Steering Committee on AMR will take up the responsibilities of developing a national action plan for AMR

including public awareness and education, information material development and campaigns to improve awareness on AMR.

The Drugs, Vaccines and Equipment Unit of the National Centre for Animal Health have revised the essential veterinary drugs for use in the country and have produced a National Drug Formulary 2013. This formulary includes necessary guidelines for the users. The unit is also responsible to monitor and evaluate the usage of veterinary drugs in the country including quality control and adverse drug reactions. Further, the unit is drafting standard treatment guidelines for the users.

Based on the evaluation of the performance of veterinary services (PVS) through OIE missions, the Royal Government of Bhutan formed a task force to review the existing livestock legislation *vis-à-vis* with other closely related legislation such as the Food Act (2005) and its rules and regulations (2007) as well as the Bhutan Medicine Act of 2003. The revised livestock legislation although in draft stage at the moment will address issues such as developing guidelines and regulations to encourage responsible and prudent use of antimicrobials.

Currently Bhutan does not have a veterinary Statutory Body (VSB). Veterinary Council Act is in draft stage and is being pursued strongly by the Department. VSB is foreseen and will be developed using OIE as a relevant guide. The VSB will eventually require a legislative framework giving required authority over all veterinarians; the role of para-professionals and community animal health workers who will form part of this framework. Thus the development of regulations and guidelines to promote responsible and prudent use of antimicrobials and improvement on policy is expected.

The National Centre for Animal Health, which is also the National Referral Laboratory currently carries out some of the functions of Antimicrobial Resistance. The unit is equipped to carry out Antimicrobial Sensitivity testing using disc diffusion method utilizing CLSI protocol. However, most of the antimicrobial sensitivity testing performed by the unit is treatment based. Very few planned surveys are carried out for antimicrobial resistance. None of the Regional Veterinary Laboratories in the country are equipped to carry out the AMR functions. Therefore, strengthening of these laboratories in terms of skilled human resources and facilities is proposed in the 11<sup>th</sup> Five Year Plan, which ends in 2018.

India: The impact of AMR on human health has been recognized by all stakeholders in India. These include the Ministry of Health & Family Welfare (Directorate General of Health Services), Ministry of Agriculture (Department of Animal Husbandry, Dairying & Fisheries (DADF), Indian Council of Agricultural Research (ICAR), Council for Scientific and Industrial Research (CSIR), etc, which have initiated programmes considering the relevance of AMR and are motivated to implement projects to address AMR developing very widely amongst microbes isolated from human, livestock, poultry and fish. Other regulatory bodies responsible for the manufacture, standards and use of antimicrobials are motivated to take up the AMR issue at their levels.

In the National Policy for Containment of Antimicrobial Resistance, India 2011, a multidisciplinary and cross sectoral National Task Force Committee was constituted comprising experts from a number of agencies. During the last year this multidisciplinary committee has met several times to develop a number of pertinent guidelines, which will be finalized soon.

India has a huge network of veterinary institutions, research institutions under the Indian Council of Agricultural Research Institutes (ICAR, under Ministry of Agriculture), State Veterinary and Agricultural Universities, which would be directed to initiate awareness about threats of mis-use and over-use of antimicrobials leading to AMR and the impact human health among farmers and farmer organizations; veterinarians, para-veterinarians, veterinary faculty staff members; policy-makers; consumers and civil society. ICAR has a total of 633 Krishi Vigyan Kendras in all districts of the country, which contain multidisciplinary teams that also include animal science, veterinary and fisheries science subject matter specialists, who may initiate awareness programmes amongst farmers once the guidelines are finalised.

There are 250 state laboratories at district and state levels to look after disease diagnosis and surveillance. In addition the ministry has one Central Disease Diagnosis Referral Laboratory and five Regional Disease Diagnosis Referral Laboratories. In addition, ICAR, State Veterinary Agricultural Universities, Research Institutions and national centers have adequate infrastructure and large numbers of competent human resources to take up various issues relating to AMR.

With regard to data on the use of antimicrobials as well as antimicrobial resistance, studies have been undertaken in different institutions throughout the country. A few examples are mentioned here for reference. In a study, more than 80% strains of enterococci of equine origin were found resistant to Vancomycin and 99.6% were multiple-drug resistant in Northern India (Singh et al., *J Infect Dev Ctries* 2009; 3(7):498-503). In a most recent study, it was observed that a large portion of *Staphylococcus spp*. isolates of pig, pig handler and sheep origins were found to be resistant (44-83%) to penicillin in addition to showing variable resistance to other antibiotics (Shome and Shome, 2013, PD-ADMAS Annual report-2012-13, pp31-34).

India is rich in ethno-veterinary medicine and indigenous traditional knowledge (ITKs) with regard to prevention and cure of human and animal diseases. This knowledge has been documented by ICAR institutions.

In addition, various stakeholders in the country are vigorously taking up improved animal husbandry practices, control programmes and bio-security measures to reduce the use of antimicrobials.

Programmes are being arranged to create public awareness as well as awareness in physicians, veterinarians etc. for judicial use of antimicrobials.

<u>Indonesia</u>: An initial pilot AMR monitoring programme was continued in 2012 and 2013, but is still not recognized as programme to monitor antimicrobial resistance in indicator bacteria (*E. coli & Salmonella spp*). Bacterial isolates were collected from

samples of the National Monitoring Programme for Microbial Contamination of Food of Animal Origin (particularly chicken meats) limited to Java Island area. Isolates identified as *E. coli* and *Salmonella spp* were tested for susceptibility to selected antimicrobial drugs (as recommended by OIE). Laboratory testing was done in the National Quality Control Laboratory for Livestock Products. The results are shown in the full report at the end of this document.

A collaborative research proposal in eco-health to formulate a strategy for prudent use of antimicrobials to control antimicrobial resistance in human, animal, and environmental health was developed by a multi-disciplinary group of Asian researchers during 2011 to 2012. In 2013, the proposal was approved by IDRC which is funding a three-year research programme, starting at the end of this 2013. The collaborative research team involved in the project consists of veterinarians, medical doctors and socio-economic experts.

Communication between veterinarians in the Ministry of Agriculture and medical doctors from Ministry of Health with regard to AMR is being initiated under the Indonesia Antimicrobial Watch program.

<u>Lao PDR</u>: Lao PDR considers AMR as an important issue and recognized the need to revise current measures that govern the import, production, marketing and use of antimicrobials. Currently, Lao PDR has five legal documents which contain comprehensive provisions that regulate the production, importation, exportation, distribution and use of antimicrobials but do not provide a legal basis for implementing AMR monitoring and control as recommended by international organizations.

In 2003, Lao PDR established a Food and Drug Committee, which consists of multisectoral agencies including representatives from the human and animal health sector. Unfortunately, this committee has not functioned very well and this year its role is under revision. Lao PDR has also assigned National Focal Points for Veterinary Products with OIE. However, for surveillance and management of AMR Lao PDR needs to improve:

- Microbiology laboratory facilities;
- Competency of human resources;
- Budget allocations for AMR monitoring/surveillance
- Coordination between parties (government, hospitals, research institutions and clinicians) to develop an integrated system of AMR management.

Lao PDR's overall expectation is to develop a system that can survey and collect data on antimicrobial resistance in relevant animal pathogens and quantities of antimicrobial agents used in food producing animals at the national level following international standards. Lao PDR is highly committed to AMR risk management and requests FAO, APHCA, OIE and WHO to seek opportunities to assist Lao PDR to develop an AMR monitoring system meeting international requirements.

<u>Malaysia</u>: Malaysia has formulated and AMR Action Plan comprising seven major lines of activity: (i) awareness campaigns, (ii) establishment of MIC testing capacity for AMR assessments, (iii) AMR information dissemination, (iv) promotion of collaborative AMR research, (v) capacity building and harmonization of laboratory methods / protocols, (vi) development of a national AMR surveillance programme for poultry at farm and processing plant level and (vii) establishment of a joint AMR working group comprising representatives of the Department of Veterinary Services and the Ministry of Health.

Myanmar: Research on AMR has been ongoing at the University of Veterinary sciences but not much has been done to undertake a nationwide situational analysis. Establishment of a National Task Force is still in the organizing phase. The development and implementation of communication and public awareness on AMU and AMR is under negotiation within the department. In addition, review and development of improved practical legislation and regulatory framework are in process. However, although the legislation has not yet been updated, the national assay laboratory has been upgraded by increasing and providing training to staff and other facilities have been equipped for the detection of AMR. Systematic monitoring and surveillance of AMU and AMR is under discussion within the department.

<u>Pakistan</u>: AMR is currently not recognized as a major issue in Pakistan. Some recent reports have, however, indicated that a number of pathogens are becoming resistant to drugs used in animal production. The development of AMR has been observed specifically for the treatment and recovery time of the animal diseases like mastitis, staphylococcal and streptoccocal infections, foot rot, navel illness, pneumonia, uro-genital tract infections, etc. Causative pathogens have developed resistance even to third generation antibiotics. The situation has become more complicated because some zoonotic pathogens originating from animals have also acquired resistance against several drugs used for their treatment in human patients.

<u>Papua New Guinea</u>: The incidence of antimicrobial resistance is not quantifiable in PNG given that neither the public health and animal health sectors are properly resourced and empowered to address the problem. However since AMR is a global issue, there is momentum in PNG currently to address this through policy developments such as the National Medicines Policy, the Food Safety Policy and the Public Health Act review that are currently underway. The animal health sector is fully engaged in these developments to ensure that issues of AMR are properly addressed.

<u>Philippines</u>: The Department of Health (DoH) and the Department of Agriculture (DA) are collaborating to address the risk of AMR and have formed a technical working group (TWG) as well as an Interagency Committee on AMR (ICAMR). The latter, in addition to DoH and DA, comprises representatives of the Department of the Interior and the Department of Science and Technology. The TWG has proposed the issuance of an Executive Order entitled 'Developing a Comprehensive and

Sustainable National Plan to Combat Antimicrobial Resistance in the Philippines', which will require approval and endorsement by the President.

In the meantime, DA has promoted a risk and HACCP-based inspection system for animal feeds, conducted seminars for veterinary drug and feed suppliers to raise awareness about AMR and is strengthening its regulatory activities. The current administration is promoting organic agriculture, which, while not directly addressing AMR risk, might indirectly mitigate the latter.

<u>Samoa</u>: A key recommendation that was raised in the 36<sup>th</sup> APHCA Session highlighted the need to introduce AMR as a technical issue for public awareness into existing mandatory food regulating authorities and committees. To date, there has been no effort by MAF to see this through. However over the last year, the Animal Production and Health Division (APHD), MAF, has made several attempts to link up with the Ministry of Health, particularly the Public Health Division. Unfortunately, there has been very poor feedback from MOH and a lack of willingness to share information and collaborate.

There are three main sources of veterinary drugs in Samoa, which include the Ministry of Agriculture and Fisheries, the Animal Protection Society (APS) and the Agricultural Store. MAF uses veterinary medicines to treat sick or injured livestock at the discretion of the Government Veterinarian and trained para-veterinarians. The medicines include five main groups of antibiotics, which all require that individual cases complete the recommended course of antibiotics. The Agriculture Store only dispenses anthelmintics and vitamins. This has a low risk implication for AMR development, but instead implicates anthelmintic resistance, which is a separate yet common problem in the livestock industry in Samoa now. The APS deals mainly with small animals and also administers and dispenses antibiotics at the discretion of their veterinarian.

APHD aims to collect information from the latter two organizations on their dispensary of veterinary drugs and integrate this information into the Ministry's animal health database.

There is currently no formal legislation to regulate the use and dispensation of veterinary medicines, which will be one of the key activities in APHD's annual work plan for 2013 – 2014.

<u>Sri Lanka</u>: The Department of Animal Health and Production (DAPH) has recognized the importance of AMR and residues in food of animal origin and is in the process of updating the regulations of the Animal Diseases and Animal Feed Acts pertaining to antimicrobials. DAPH has prohibited the use of therapeutic antibiotics in feed, is screening selected poultry pathogens (*E. coli, Campylobacter spp.* and *C. perfringens*) for AMR and has strengthened the controlling of illegal antibiotic sales.

<u>Thailand</u>: in May 2013, the National Committee on Preparedness, Prevention and Resolution of Emerging Infectious Diseases appointed by Prime Minister in July 2012 and chaired by Deputy Prime Minister had established the Sub-Committee on

Prevention, Control and Resolution of Antimicrobial-Resistant Pathogens. The Sub-Committee composes of relevant personnel working on animal health and public health from public, private and academic sectors. It is chaired by the permanent secretary of the Ministry of Public Health with the secretary team composed of the Directors General from Department of Disease Control, Department of Medical Services, Department of Medical Sciences and Department of Livestock Development and the Dean of Faculty of Medicine Siriraj Hospital.

The DLD is amending the existing DLD Working Group on Antimicrobial-Resistant Organisms and Genetics in Animals, Animal Products and Farm Environment, which was established in 2011, to include more relevant private and academic sectors in order to support and put into practice the action plan of the Sub-Committee on Prevention, Control and Resolution of Antimicrobial-Resistant Pathogens in the field of animals.

In collaboration with the Center for Antimicrobial Resistance Monitoring in Foodborne Pathogens (in cooperation with WHO), Faculty of Veterinary Science, Chulalongkorn University, DLD organized a workshop to harmonize the laboratory techniques for AMR testing of the nine DLD laboratories.

Meanwhile, Ministry of Agriculture and Cooperatives is going to issue a Notification under the Feed Quality Control Act to prohibit mixing of animal feed with pharma chemicals, salt of pharma chemicals and semi-processed pharma chemicals which are used for manufacturing of medicines for treatment, relief, cure or prevention of human and animal disease or illness. The draft notification has already passed the public hearing.

Communication and public awareness on AMU and AMR has been raised through:

- Training on antimicrobial resistance in foodborne pathogens for ASEAN universities, 26-30 Aug 2013 by the Faculty of Veterinary Science, Chulalongkorn University; and
- International seminar "Strides on antimicrobial resistance in livestock" in Thailand Lab 2013 exhibition, 29 Aug 2013 at BITEC Bangna, Bangkok
- Country Reports on National Currency Funds: Country delegates briefly reported on the status of the National APHCA Currency Fund and other financing mechanisms available to support activities in line with the APHCA work programme. Bhutan and Thailand are the only two APHCA member countries that have established a specific fund to support APHCA activities. In many countries establishment of a specific fund is severely constrained by administrative rules and regulations. However, most countries have incorporated specific activities, e.g. AMR awareness raising, improvement of AMR testing capacity into their regular operating budgets. In addition to the budget earmarked for specific activities, some countries can access budget allocations for 'international cooperation', which can be used to support 'networking' activities.

- ➤ Request for APHCA Membership by SPC: SPC officially requested membership of APHCA through letter of the Deputy Director General of 21 June 2013 (APHCA 2013/06). Dr K. Cokanasiga, animal health and production advisor of SPC provided some background on SPC and its request for APHCA membership.
  - The Secretary pointed out that a positive decision would require a slight modification of Article III, para 1, defining eligibility for membership, to broaden the latter to include intergovernmental organizations within the 'Region'.
- Scale of Contributions: At the 36<sup>th</sup> Session, the secretariat was requested to review the scale of contributions in accordance with the original criteria used for their establishment, maintaining 3 categories and phasing of the increment over successive years. The secretary presented the proposed scale of contributions for 2014 and 2015 and explained the rationale behind the proposal (APHCA 2013/06).
- ▶ Proposed 2014 Workplan and Budget: The Secretary presented the proposed workplan and budget for 2014. The proposed budget for 2014 amounts to US\$135 000 for six thematic thrusts: (i) smallholder dairy development US\$25 000 (ii) zoonoses and food safety US\$20 000 (iii) feed resource management US\$20,000 (iv) AMR Risk management US\$20 000 (v) livestock policy capacity development US\$20 000 and (vi) information dissemination and APHCA positioning US\$30 000. FAO's anticipated contributions to the workplan are estimated at US\$135 000. The operational breakdown as well as FAO's anticipated contributions to the workplan are detailed in APHCA 2013/06.

#### Thursday, 26 September 2013, morning

➤ **Decisions taken**: The delegates attending the Session, representing more than a two-thirds majority of the membership of the Commission, unanimously agreed on the following:

<u>SPC membership</u>: To amend the APHCA Agreement to open membership to intergovernmental organizations within the APHCA region (Article III, para 1) and to accept SPC as new APHCA member. It was furthermore decided that Intergovernmental organizations should fall into Group A in the scale of contributions.

<u>Scale of contributions</u>: To adopt the scale of contributions proposed by the Secretariat for 2014 and 2015 as follows:

Group	Countries	2014	2015
Α	Australia, China, India, Japan, New Zealand	12 000	14 000
В	Afghanistan, Bangladesh, Indonesia, Iran,	7 500	8 400
	Rep. Korea, Malaysia, Myanmar, Pakistan,		
	Philippines, Sri Lanka, Thailand, Vietnam		
С	Bhutan, Cambodia, Fiji, Lao PDR, Maldives,	2 400	2 750
	Mauritius, Mongolia, Nepal, PNG,		
	Singapore, DPRK, Samoa		

Workplan and budget for 2014: To approve the workplan and budget for 2014 as proposed by the Secretariat and detailed in the tables below.

Operational Budget, APHCA TF and Estimated Contribution of FAO-RAP

		FAO's	
		Estimated	
Budget line	APHCA TF	Contribution	Total
5011 Salaries Prof.	0	45,000	45,000
5012 Salaries GS	25,000	25,000	50,000
5013 Consultants	26,000	30,000	56,000
5014 Contracts	30,000	25,000	55,000
5020 Locally Contracted Labour	1,000	0	1,000
5021 Travel	46,000	10,000	56,000
5023 Training	0	0	0
5024 Expendable Procurement	1,000	0	1,000
5025 Non-expendable Procurement	0	0	0
5026 Hospitality	2,000	0	2,000
5028 GOE	4,000	0	4,000
Total	135,000	135,000	270,000

#### **Functional Budget, APHCA TF**

Activity / Thematic Area		Amount (US\$)
Smallholder Dairy Development		25,000
Feed Resource Management		20,000
Zoonoses and Food Safety		20,000
Antimicrobial Resistance (AMR) Management		20,000
Livestock Policy Capacity Development Plan		20,000
Information Dissemination and APHCA Positioning		30,000
	Total	135,000

Any other business: The Secretary informed delegates that FAO-APHCA and the OIE Regional Representation for Asia and the Pacific had engaged in discussions to identify areas for close collaboration and joint activities, which would not duplicate activities carried out within the ambit of existing initiatives. Three areas for close collaboration and joint activities have been identified, namely: (i) brucellosis, (ii) AMR management, and (iii) 'neglected zoonoses'.

With regards to brucellosis, the intention of FAO-APHCA and the OIE Regional Representation is to build on the long-standing joint capacity building activities in brucellosis diagnostics and move forward to jointly promote the intensification of national and regional control activities. Veterinary AMR management is an issue of strong mutual interest and close collaboration would exploit the complementarity of the two organizations, with OIE focusing on the development of standards (and

guidelines) and collection of antimicrobial usage data, while FAO-APHCA would focus on supporting countries in their endeavour to comply with the international standards. A first common step in the area of 'neglected zoonoses' would be a deeper joint assessment of country priorities, building on work done by FAO and ILRI (zoonotic disease burden) and OIE in 2012 (country priorities), and subsequent targeting of a limited number of zoonoses, so far not addressed by international programmes.

Delegates welcomed the proposed collaboration and recommended FAO and OIE to engage with the respective authorities in the member countries and to foster a systematic and inclusive assessment process.

The Chairperson, fully acknowledging the significance of animal health issues in the region, made a strong plea for FAO-APHCA not to exclusively direct its efforts animal health issues but to also address important problems in the area of animal production, such as animal feeding and nutrition, and value chain development.

Next venue and dates: Thailand proposed to host the 38<sup>th</sup> Session putting forward Chiang Mai as preferred venue. For climatic, cultural and fiscal reasons early November 2014 would be the most suitable time for the Session.

Delegates welcomed Thailand's offer to host the 38<sup>th</sup> Session in November 2014. It was agreed that the Technical Meeting held in conjunction with the Session should focus on animal nutrition / feeding and smallholder dairy value chains.

The Malaysian delegate offered to explore the possibility of Malaysia hosting the 39<sup>th</sup> Session in 2015.

➤ Closure: The Chairperson thanked the Secretariat for its commitment and dedicated work since the 36<sup>th</sup> Session and commended the delegates for their constructive contributions made at the current Session. He urged APHCA members to increase 'ownership of their' Commission and welcomed SPC as new prospective member, hoping that APHCA membership would further expand. The Chairperson closed the Session at 10:30.

## Timetable and Agenda (APHCA 2013/01)

#### **Timetable**

#### Sunday, 22 September

Arrival of guests

The 74<sup>th</sup> Executive Committee meeting (for APHCA executive members – Sri Lanka (Chair), Bhutan (Vice-chair), Australia, Myanmar, Samoa and The Philippines (*ex-officio* member)) between 16:00 and 17:00 hours.

Free evening

#### Monday, 23 September

Morning: 37<sup>th</sup> APHCA Session

08:30 – 09:30	Registration
09:30 - 10:00	Opening Ceremony
10:00 - 10:30	Tea / Coffee Break
10:30 - 12:30	<b>Business Session</b>
12:30 - 14:00	Lunch

## Afternoon: 37<sup>th</sup> APHCA Session

14:00 – 15:30	Business Session (cont.)
15:30 - 16:00	Tea / Coffee Break
16:00 – 17:30	Business Session (cont.)

19:00 – 21:00 Reception dinner hosted by Hon'ble Secretary, MoAF

### Tuesday, 24 & Wednesday, 25 September

- 24 & 25 September: APHCA-OIE Regional Workshop: Zoonoses, Food-borne Diseases and Antimicrobial Resistance – Incidence, Impact and Interventions in the Asia-Pacific Region
- 25 September: Field trip
- 25 September: Dinner hosted by His Excellency, the Minister, MOAF

## Thursday, 26 September

Morning: 37<sup>th</sup> APHCA Session (cont.)

08:30 - 09:30	Business Session (cont.)
09:30 - 10:00	Tea / coffee break
10:00 - 11:00	Business Session (cont.), adoption of session report and closure

## **Provisional Agenda**

## Monday, 23 September

08:30 - 09:30 09:30 - 10:00	Registration Opening Ceremony  Traditional Marchang ceremony  Welcome by Offg. Director, Department of Livestock, Dr Tashi Dorji  Welcome by APHCA Chairperson, Dr W.K. de Silva  Welcome Address on behalf of FAO, APHCA Secretary, Dr Joachim Otte  Opening Address by Guest of Honour, Mr Yeshi Dorji, His Excellency, the Minister, Ministry of Agriculture and Forests  Vote of Thanks, RAP Livestock Policy Officer, Dr Vinod Ahuja
10:00 - 10:30	Tea / Coffee Break
10:30 - 12:30	Business Session, Provisional Agenda Items
	<ul><li>Election of New Chairperson, Vice-Chair and 3 ExCom Members</li><li>Adoption of the agenda</li></ul>
	- Approval of the Minutes of the 74 <sup>th</sup> ExCom and 36 <sup>th</sup> Session
	- Summary statement of APHCA account
12:30 – 14:00	- Summary of activities performed between Oct. 2012 and Sept. 2013 Lunch
14:00 – 15:30	- Smallholder Dairy Network activities
14.00 15.50	<ul> <li>RAP animal health activities (TADs &amp; zoonoses control / management)</li> <li>Agenda of Action for sustainable livestock sector development</li> </ul>
15:30 - 16:00	Tea / Coffee Break
16:00 – 17:30	<ul> <li>Country reporting on (i) AMR management actions undertaken as follow-up of 36<sup>th</sup> Session and (ii) status of National Currency Fund (Delegates)</li> </ul>
	- Items for decision
	<ul><li>Scale of contributions</li><li>Membership requests</li></ul>
	<ul> <li>Proposed work plan and budget Q4 2013 and FY 2014</li> </ul>
18:30 – 20:30	Reception dinner hosted by Hon'ble Secretary, MoAF (Hotel Phuentsho

Pelri)

## Thursday, 26 September

08:30 - 09:30 09:30 - 10:00	<ul> <li>Business Session (cont.), Provisional Agenda Items</li> <li>Decisions on items tabled for decision</li> <li>Recommendations emanating from the Business Session and from zoonoses, food-borne diseases and AMR workshop</li> <li>Tea / Coffee Break</li> </ul>
10:00 – 11:00	<ul> <li>Business Session (cont.)</li> <li>Recommendations emerging from the Business Session and from the zoonoses, food-borne diseases and AMR workshop (cont.)</li> <li>Next venue and dates</li> <li>Any other business</li> <li>Adoption of the minutes / report of the session</li> <li>Closure</li> </ul>

## **Provisional Workshop Programme**

## Tuesday, 24 September

08:30 - 09:30 09:30 - 10:30	Registration Opening Session Welcome: APHCA Chairperson Keynote: Zoonotic and food-borne disease challenges in a globalised world – <i>Prof. D.U. Pfeiffer, RVC</i>
10:30 - 11:00 11:00 - 12:30	Tea / Coffee Break Session 1: Country Reports on Incidence, Impact and Control of Zoonoses and Food-borne Diseases (3 reports of 20 minutes each plus 10 minutes discussion) – Chair: tbd Bhutan – Dr N.P. Dahal SPC – Dr K. Cokanasiga Viet Nam – Dr N.H. Tung (tbc)
12:30 – 14:00	Lunch

14:00 – 15:30	Session 2: Activities of International Organizations on Zoonoses and Food-borne Diseases in the Asia-Pacific Region (3 reports of 20 minutes each plus 10 minutes discussion) – Chair: tbd FAO – Dr W. Kalpravidh and Dr C. Benigno (FAO Bangkok)
	OIE – Dr T. Ishibashi (OIE Tokyo)
	WHO – Dr C. Winter (WHO Bhutan)
15:30 - 16:00	Tea / Coffee Break
16:00 - 18:00	Session 3: International Zoonoses and Food-borne Disease Research
	Programmes in the Asia-Pacific Region and Salient Findings (4 reports of
	20 minutes each plus 10 minutes discussion) – Chair: tbd
	ACIAR – Dr M. Nunn (ACIAR, Australia)
	CIRAD – Dr J. Capelle (CIRAD, Cambodia)
	ILRI – Dr J. Gilbert (ILRI, Lao PDR)
	Oxford University – Dr J. Bryant (OXU, Ho Chi Minh City)
18:30 – 20:30	Dinner hosted by FAO-APHCA and OIE (at the Folk Heritage Museum Restaurant)

## Wednesday, 25 September

08:30 – 10:30	Session 4: Antimicrobial Resistance (AMR) associated with Animal Production, its Management and Alternatives to Antimicrobials (4 reports of 20 minutes each plus 10 minutes discussion) – Chair: tbd U. Utrecht – Prof J. Wagenaar: International research on antimicrobial resistance at the animal-human interface in the Asia-Pacific region OIE – Dr E. Erlacher-Vindel: FAO-OIE-WHO Tripartite approach and OIE activities on AMR  U. Utrecht – Dr D. Speksnijder: Tailored interventions to promote prudent antimicrobial use; theory and practice  U. Tokyo – Dr K. Hirayama: Trends in bacterial food poisoning and possible control by normal and beneficial bacteria
10:30 - 11:00	Tea / Coffee Break
11:00 – 13:00	Session 5: Discussion, Conclusions and Recommendations Chair: tbd
13:00 – 14:00	Lunch
14:15 – 18:00	<b>Field trip organized by RgoB</b> (Druk Wangyal Chorten Dochula, Kuensel Phodrang, Buddha Point, Tashi Choe Dzong)
18:45 – 20:45	Dinner hosted by His Excellency Minister for MoAF (Namgay Heritage)

# Dates and Venues (Host Countries) of APHCA Sessions (APHCA 2013/02)

#### First

Bangkok, Thailand, 7-11 June 1976 Chairman: Dr J.C. Madamba (Philippines) Vice-Chairman: Dr M.N. Menon (India) Members of the Executive Committee: Delegates from Malaysia, Sri Lanka and Thailand

#### **Third**

Bangkok, Thailand, 16-21 July 1978 Chairman: Dr S. Thuraisingham (Malaysia) Vice-Chairman: Dr A. Bandaranayake (Sri Lanka)

Members of the Executive Committee:
Delegates from Australia, Philippines and
Thailand

#### Fifth

Bangkok, Thailand, 6-11 October 1980 Chairman: Dr Tim Bhannasiri (Thailand) Vice-Chairman: Dato' Dr Osman bin Din (Malaysia)

Members of the Executive Committee: Delegates from India, Indonesia and Sri Lanka

#### Seventh

Surabaya, Indonesia, 13-18 December 1982
Chairman: Prof. Dr J.H. Hutasoit (Indonesia)
Vice-Chairman: Dato' Dr Osman bin Din
(Malaysia)
Members of the Executive Committee:
Delegates from India, Philippines and

Thailand

### Ninth

New Delhi, In, 8-13 October 1984 Chairman: Dr O.N. Singh (India) Vice-Chairman: Dr I.G.R. Davis (Australia) Members of the Executive Committee: Delegates from Nepal, Singapore and Sri Lanka

#### Second

Kuala Lumpur, Malaysia, 22-26 August 1977 Chairman: Dr S. Thuraisingham (Malaysia) Vice-Chairman: Dr A. Bandaranayake (Sri Lanka)

Members of the Executive Committee: Delegates from Australia, Nepal and Thailand

#### **Fourth**

Manila, Philippines, 3-7 September 1979
Chairman: Dr S.H. Escudero III (Philippines)
Vice-Chairman: Dr Y. Prased (India)
Members of the Executive Committee:
Delegates from Bangladesh, Malaysia and
Singapore

#### Sixth

Colombo, Sri Lanka, 10-15 August 1981 Chairman: Dr S.B. Dhanapala (Sri Lanka) Vice-Chairman: Dr J.H. Hutasoit (Indonesia) Members of the Executive Committee: Delegates from Australia, India and Malaysia

#### **Eighth**

Bangkok, Thailand, 3-8 October 1983 Chairman: Dato' Dr Osman bin Din (Malaysia) Vice-Chairman: Dr O.N. Singh (India) Members of the Executive Committee: Delegates from Australia, Bangladesh and Papua New Guinea

#### **Tenth**

Melbourne, Australia, 7-13 October 1985
Chairman: Dr R.W. Gee (Australia)
Vice-Chairman: Dr Giam Choo Hoo
(Singapore)
Members of the Executive Committee:
Delegates from Pakistan, Sri Lanka and
Thailand

#### Eleventh

Bangkok, Thailand, 7-13 October 1986 Chairman: Dr Giam Choo Hoo (Singapore) Vice-Chairman: Dr J.A. deS. Siriwardene (Sri Lanka)

Members of the Executive Committee:
Delegates from Iran, Malaysia and Philippines

#### Thirteenth

Bangkok, Thailand, 25-31 October 1988 Chairman: Dr Vitoon Khumnirdpetch (Thailand)

Vice-Chairman: Dr Soehadji (Indonesia) Members of the Executive Committee: Delegates from India, Malaysia and Sri Lanka

#### **Fifteenth**

Bangkok, Thailand 17-22 October 1990 Chairman: Dr A.M.B.H. Babje (Malaysia) Vice-Chairman: Dr R.N. Alcasid (Philippines) Members of the Executive Committee: Delegates from Australia, Iran and Pakistan

#### Seventeenth

Manila, Philippines, 17-21 November 1992 Chairman: Dr W A. Geering (Australia) Vice-Chairman: Dr A.A. Motallebi (Iran) Members of the Executive Committee: Delegates from Indonesia, Malaysia and Thailand

#### Nineteenth

Tehran, Iran, 20-24 November 1994 Chairman: Dr Wipit Chaisrisongkram (Thailand)

Vice-Chairman: Dr S.K. Shrestha (Nepal) Members of the Executive Committee: Delegates from Australia, India and Indonesia

#### **Twelfth**

Islamabad, Pakistan, 5-10 October 1987 Chairman: Dr M. Anwar Khan (Pakistan) Vice-Chairman: Dr A. Mustaffa Babjee (Malaysia) Members of the Executive Committee: Delegates from India, Philippines and

#### **Fourteenth**

Thailand

Jakarta, Indonesia, 30 October – November 1989

Chairman: Dr Soehadji (Indonesia)
Vice-Chairman: Dr A.K. Chatterjee (India)
Members of the Executive Committee:
Delegates from Australia, Philippines and Sri
Lanka

#### Sixteenth

Kuala Lumpur, Malaysia, 7-12 October 1991 Chairman: Dr R.N. Alcasid (Philippines) Vice-Chairman: Dr W.A. Geering (Australia) Members of the Executive Committee: Delegates from Iran, Myanmar and Thailand

#### Eighteenth

Darwin, Australia, 17-20 August 1993
Chairman: Dr A.A. Motallebi (Iran)
Vice-Chairman: Dr Wipit Chaisrisongkram
(Thailand)
Members of the Executive Committee:
Delegates from Nepal, Philippines and
Singapore

#### **Twentieth**

Bangkok, Thailand, 30 August-2 September 1995

Chairman: Dr S.K. Shrestha (Nepal)
Vice-Chairman: Mr K. Rajan (India)
Members of the Executive Committee:
Delegates from Australia, Malaysia and Sri
Lanka

#### **Twenty-First**

Kathmandu, Nepal, 3-6 March 1997 Chairman: Mr G.R. Patwardhan (India) Vice-Chairman: Dr A.S. Abeyratre (Sri Lanka) Members of the Executive Committee: Delegates from Australia, Indonesia and the Philippines

#### Twenty-Third

Kochi (Cochin), India, 4-6 September 1999 Chairman: Dr V.K. Taneja (India) Vice-Chairman: Dr T.A. Abilay (Philippines) Members of the Executive Committee: Delegates from Nepal, Papua New Guinea and Thailand

#### Twenty-Fifth

Manila, Philippines, 24-26 September 2001 Chairman: Dr J.Q. Molina (Philippines) Vice-Chairman: Dr Mohd Nordin Mohd Nor (Malaysia) Member of the Executive Committee: Delegates from Australia, Bhutan, and

#### Twenty-Seventh

Thailand

Lahore, Pakistan, 25-29 August 2003
Chairperson: Dr Rafaqat H. Raja (Pakistan)
Vice-Chairperson: Delegate from Indonesia
Members of the Executive Committee:
Delegates from India, Nepal and Thailand
Ex-Officio Member: Delegate from the
Philippines

#### **Twenty-Ninth**

Bali, Indonesia, 26-29 September 2005
Chairperson: Dr Mathur Raidy (Indonesia)
Vice-Chairperson: Delegate from Thailand
Members of the Executive Committee:
Delegates from India, Myanmar and Sri Lanka
Ex-Officio Member: Delegate from Pakistan

#### **Twenty-Second**

Bangkok, Thailand, 22-24 June 1998 Chairman: Dr S.S.E. Ranawans (Sri Lanka) Vice-Chairman: Mr G.R. Patwadham (India) Members of the Executive Committee: Delegates from Laos, Myanmar and Thailand

#### Twenty-Forth

Dhaka, Bangladesh, 6-9 November 2000 Chairman: Dr V.K. Taneja (India) Vice-Chairman: Dr T. A. Abilay (Philippines) Members of the Executive Committee: Delegates from Bangladesh, Papua New Guinea and Nepal

#### Twenty-Sixth

Subang Jaya, Malaysia, 24-26 August 2002 Chairperson: Dr J.Q. Molina (Philippines) Vice-Chairperson: Dato' Dr Mohd. Nordin Haji Mohd. Nor (Malaysia) Members of the Executive Committee: Delegates from Bhutan, Pakistan and Thailand Ex-Officio Member: Delegate from India

## Twenty-Eight Chiang Mai, Thailand, 27 September – 1

October 2004
Chairperson: Dr Rafaqat H. Raja/Dr M. Afzal (Pakistan)
Vice-Chairperson: Delegate from Indonesia Members of the Executive Committee: Delegates from India, Nepal and Thailand

#### Thirtieth

Luang Prabang, Lao PDR, 22-26 October 2006
Chairperson: Dr Bounkhouang
Khambounheuang (Lao PDR)
Vice-Chairperson: Delegate from Sri Lanka
Members of the Executive Committee:
Delegates from India, Myanmar and Thailand
Ex-Officio Member: Delegate from the
Indonesia

#### **Thirty-First**

Chiang Mai, Thailand, 29 October – 1 November 2007

Chairperson: Dr M.J. Nunn (Australia)
Vice-Chairperson: Delegate from Nepal
Members of the Executive Committee:
Delegates from Bhutan, India and Mongolia
Ex-Officio Member: Delegate from Lao PDR

#### Thirty-Third

Pokhara, Nepal, 26-28 October 2009 Chairperson: Dr Prabhakar Pathak (Nepal) Vice-Chairperson: Delegate from Thailand Members of the Executive Committee: Delegates from Iran, Malaysia and PNG Ex-Officio Member: Delegate from Australia

#### Thirty-Fifth

Cebu, Philippines, 2-4 November 2011 Chairperson: Delegate from the Philippines Vice-Chairperson: Delegate from Sri Lanka Members of the Executive Committee: Delegates from Bangladesh, Myanmar and Samoa

Ex-Officio Member: Delegate from Thailand

#### Thirty-Second

Bangkok, Thailand, 27-30 October, 2008 Chairperson: Dr M.J. Nunn (Australia) Vice-Chairperson: Delegate from Nepal Members of the Executive Committee: Delegates from Bhutan, India and Mongolia

#### **Thirty-Forth**

Phuket, Thailand, 25-27 October 2010
Chairperson: Mr P Somboonprasert (Thailand)
Vice-Chairperson: Delegate from the
Philippines
Members of the Executive Committee:
Delegates from Australia, Samoa and Sri
Lanka

Ex-Officio Member: Delegate from Nepal

#### Thirty-Sixth

Negombo, Sri Lanka, 21-24 October 2012 Chairperson: Sri Lanka Vice-Chairperson: Delegate from Bhutan Members of the Executive Committee: Delegates from Australia, Myanmar and Samoa Ex-Officio Member: Delegate from the

**Philippines** 

#### List of APHCA Chairpersons by Country (as of 2012)

Australia	4	Lao PDR	1	Philippines	5
Bangladesh	0	Malaysia	5	Samoa	0
Bhutan	0	Mongolia	0	Singapore	1
India	4	Myanmar	0	Sri Lanka	3
Indonesia	3	Nepal	2	Thailand	4
Iran	1	Pakistan	3		
Korea DPR	0	PNG	0		

## List of APHCA Executive Committee Members by Country (as of 2012)

Australia	12	Lao PDR	1	Philippines	8
Bangladesh	3	Malaysia	7	Samoa	3
Bhutan	5	Mongolia	2	Singapore	3
India	10	Myanmar	6	Sri Lanka	11
Indonesia	4	Nepal	7	Thailand	16
Iran	4	Pakistan	4		
Korea DPR	0	PNG	3		

# Minutes of the 73<sup>rd</sup> Executive Committee Meeting and the 36<sup>th</sup> APHCA Session (APHCA 2013/03)

## The 73<sup>rd</sup> Executive Committee Meeting

#### Sunday, 21 October 2012, 17:00 to 18:45 hours

- ➤ The meeting was chaired by Dr R. Cresencio, delegate from the Philippines, who took over from Dr E. Nuestro upon his change in position. Present were the delegates from Myanmar, Samoa, Sri Lanka, Thailand. The delegate from Bangladesh could not attend as the nomination had been received too late to make travel arrangements. The meeting was furthermore attended by members of the APHCA Secretariat.
- ➤ The Chairperson welcomed the delegates, commended APHCA for its steadfastness and instrumental activities in support of member countries and thanked Sri Lanka for hosting the Session.
- ➤ The APHCA Secretary welcomed the delegates and expressed his appreciation for their presence. He informed that all APHCA member countries, with the exception of Mongolia, have accepted the invitation, while the delegate from Bangladesh has not been able to finalize travel requirements in time and the delegate from Papua New Guinea had cancelled his travel due visa problems.
- ➤ The ExCom reviewed and adopted the agenda of the 36<sup>th</sup> Session and associated workshop on antimicrobial use (AMU) and resistance (AMR) in the Asia-Pacific Region.
- ➤ The ExCom reviewed and approved the minutes of the 72<sup>nd</sup> Executive Committee Meeting and 35<sup>th</sup> Session.
- ➤ The APHCA Secretary reported on the financial situation of the Commission. At the beginning of 2012 (01.01.2012), the cash balance in the APHCA Trust Fund stood at US\$223,063 plus US\$90,453 of cumulative interest earned. Contributions received for 2012 so far (31.09.2012) amount to US\$54,066.14 (outstanding 2012 contributions total US\$36,475.86). Overall the financial situation of APHCA has remained stable over the past years with the cash balance fluctuating between US\$200,000 and US\$300,000.
- ➤ The APHCA secretary requested permission for transfer of APHCA's accumulated interest of US\$90,453 into the disposable cash account.
- ➤ The ExCom noted with disappointment that over the years Bangladesh had accumulated arrears of US\$42,294.00 and urged the next Chairperson to take the matter up with the Bangladesh counterpart.

- ➤ The APHCA Secretary provided a brief summary of activities carried out since the last meeting in Cebu, Philippines. Activities of FAO-RAP Livestock Group staff encompassed technical support to more than 20 projects, organization of symposia, meetings, workshops and other events as well as representation of FAO and APHCA at events organized by other organizations. The main activities carried out in relation to the APHCA workplan for 2012 are the organization of the APHCA Strategy workshop, continuation of work linked to the smallholder dairy development 'programme' including co-organization of the First Asia Dairy Goat Conference, organization of an Asia Livestock Policy Forum in Bangkok and activities leading to enhance information dissemination and visibility carried out by the Information Unit.
- ➤ Given some under-spending to be expected in 2012 vis-à-vis the proposed budget, the Secretary requested permission to carry-over unspent funds into 2013 to carry complete 2012 planned activities.
- > The APHCA Secretary provided a brief outlook on salient issues APHCA might consider to systematically address in the coming years, following the mission, vision and guiding principles established at the APHCA Strategy Workshop held in March 2012. Thematically, the issues comprise continued attention to smallholder dairy development as an important 'tool' for poverty reduction and rural development. Indepth assessments of the burden and impact of zoonoses, food-borne diseases and antimicrobial resistance, building on intensified collaboration with OIE and WHO, to support decision making on resource allocation of national health systems. Given the rising cost of animal feed, national feed resource assessments would be useful in guiding livestock sector development. Establishment of a common approach for feed resource assessment across interested countries, drawing on national and international expertise, could be an area for APHCA engagement. Finally, the APHCA improving of APHCA's information proposed dissemination, communication and visibility through more information exchange between member countries and the secretariat and the establishment of a Livestock Policy Network as a two other key areas of investment closely linked to two areas of strategic actions recommended at the APHCA Strategy workshop.
- ➤ The proposed APHCA workplan and budget for 2013 amounts to US\$125,000 for five thematic thrusts: (i) smallholder dairy development, to expand into dairy goats US\$35,000 (ii) zoonoses, food safety and AMR US\$30,000 (iii) the development of feed assessment systems US\$20,000 (iv) information dissemination and APHCA positioning, and (v) support to the development of a detailed proposal for a livestock policy network US\$10,000. FAO's anticipated contributions to the workplan are estimated at US\$165,000.
- ➤ The ExCom discussed the issue of National Currency Funds (NCF) which in the past have been very useful for financing in-county activities in support of APHCA activities and suggested that member countries investigate and report on the status of their NCFs at the next Session.
- The Chairperson closed the meeting at 18:45.

#### The 36th APHCA Session

#### Monday, 22 October 2012, morning

- ▶ Opening: The opening of the 36<sup>th</sup> APHCA session was presided over by H.E. H.R. Mithrapala, Deputy Minister, and Dr. Thilak Kenderagama, Secretary, Ministry of Livestock and Rural Community Development. The session was attended by delegates from 15 member countries (Australia, Bhutan, India, Indonesia, Iran, Korea DPR, Lao PDR, Malaysia, Myanmar, Nepal, Pakistan, Philippines, Samoa, Sri Lanka, and Thailand) and observers from OIE and ACIAR.
- Adoption of the Agenda: The Agenda was adopted.
- ➤ Election of the Chairperson and Members of the Executive Committee: The Executive Committee was elected as follows:

The Executive Committee comprises:
Chairperson:
Sri Lanka
Vice-chairperson:
Bhutan

Members: Australia, Myanmar and Samoa

Ex-officio member: The Philippines

The outgoing Chairperson, Dr Rubina Cresencio, thanked the delegates for their support and handed over the chairmanship of the Session to Dr de Silva.

- ➤ Approval of the Minutes of the 72<sup>nd</sup> Executive Committee Meeting and the 35<sup>th</sup> APHCA Session: The Minutes were reviewed and approved by the delegates.
- > Statement of Accounts: The Secretary presented the status of the APHCA accounts for 2011 and expenditures for 2012. The approved budget for 2011 was US\$75,000 while the 2011 expenditures amounted to US\$90,098 (APHCA 2012/04). The reason for this overspending have been higher than budgeted travel costs for participants to attend APHCA (co-)sponsored workshops, for example the OIE-APHCA Workshop on bluetongue diagnosis and control held in Indonesia.

Overall, over the past three to four years, APHCA's cash balance has fluctuated between US\$200,000 and US\$300,000. At the beginning of 2012 (01.01.2012), the cash balance in the APHCA Trust Fund stood at US\$223,063 plus US\$90,453 of cumulative interest earned. The Secretary requested consent of the delegates for accumulated interest earned up to 31.12.2011 to be moved into the cash account at disposal for APHCA activities.

The statement of accounts for the year 2011 was approved.

Up to 31.09.2012, contributions received for 2012 amount to US\$54,066.14 (outstanding 2012 contributions total US\$36,475.86). Cumulative outstanding contributions total US\$81,597.06, more than half of which is accounted for by Bangladesh. Expenditures in 2012 are likely to be slightly below the approved budget due to higher than expected co-funding of activities from other sources.

Delegates requested the Chairperson to officially take up the issue of arrears with the counterpart of Bangladesh. Delegates furthermore requested the Chairperson and Secretariat to invite more countries, e.g. Japan, China, Vietnam, Cambodia and Pacific island states to join APHCA.

Prior to issuance of invitations to join, in line with the decision taken at the 34<sup>th</sup> Session to raise the contributions, the secretariat was requested to review the scale of contributions in accordance with the original criteria used for their establishment, maintaining 3 categories and phasing of the increment over successive years. The proposed scale of contributions would be circulated to the Executive Committee and thereafter to Member countries.

➤ Report of Activities: The Secretary presented the activities conducted by APHCA and the RAP livestock group (RAP-LG) solely or in collaboration with other groups, irrespective of sources of funding and not limited to APHCA Member countries (APHCA 2012/05).

Since the last Session, the RAP livestock group has been involved in the implementation of 21 country-specific as well as sub-regional (e.g. SAARC, ASEAN, Greater Mekong Sub-Region) projects with animal health and / or animal production components. About half of the projects are financed by FAO through its Technical Cooperation Programme (TCP) while the remaining half receive funding from other national or international agencies through uni- or multi-lateral donor trust funds.

Partly in conjunction with but also in addition to engagement in project implementation staff of the RAP-LG have organized 19 meetings, workshops and other events. Fifteen workshops were organized as part of the abovementioned projects while the 2<sup>nd</sup> Global Multi-stakeholder Platform Meeting on the Global Agenda for Sustainable Livestock, the APHCA strategy workshop and the Regional Livestock Policy Forum were funded from diverse sources, including the APHCA trust fund. In addition, as part of the smallholder dairy development thrust, RAP-LG coorganized the Thailand Celebration of World Milk Day.

In the reporting period, RAP-LG staff attended 21 congresses, symposia, meetings or workshops to (re)present FAO/APHCA and to provide technical expertise. FAO (RAP and HQ) co-funded and contributed to the organization of the First Asia Dairy Goat Conference held in Malaysia in April 2012.

In line with the Vision of APHCA to establish itself as a prime source of information, knowledge, expertise and experience on all aspects of livestock sector development in the Asia-Pacific region formulated at the APHCA Strategy Workshop, the Information Unit has devoted considerable time to improving the APHCA website. Since the Strategy Workshop (March 2012), the home-page was converted to being 'news-based', electronic documents to which FAO has copyrights were uploaded, the net was searched for relevant links (e.g. research institutes, national authorities, open access journals, etc) and these were posted on the website. The changes made

have considerable increased APHCA's web-presence, site visits now reaching more than 10,000 per month.

Finally, RAP-LG have commissioned a number of studies in various countries in the region on topics such as fodder resources, livestock sector developments and food security, livestock and livestock product trade, patterns of livestock product consumption, swine disease emergence etc. Some of these studies are carried out as part of the projects implemented by RAP-LG while others have been commissioned as part of FAO's Regular Programme.

A number of new projects and activities will be initiated before the end of 2012, amongst others comprising a school milk project in Bangladesh funded by Rabobank and a Dairy Symposium held in conjunction with the 15<sup>th</sup> AAAP in Bangkok.

The Secretary requested permission by the member countries to utilize unspent 2012 funds for implementation / completions of approved activities in 2013.

> Special Issues: The Secretary presented a brief overview of special issues (APHCA 2012/06) deemed to require APHCA attention and providing the rationale for the 2013 workplan and budget proposal.

APHCA's Strategic Plan — The first item under this point of the agenda were the 'cornerstones' of APHCA's Strategic Plan as they were elaborated in the Strategy Workshop held in March 2012. The Secretary reiterated that the 'Vision' developed at the workshop was for APHCA to be recognized as a prime source of information, knowledge, expertise and experience on all aspects of livestock sector development in the Asia-Pacific region. In order to realize this vision, APHCA has to develop into a knowledge network requiring enhanced exchange of information and experience between members but also with other institutions. For FAO / RAP-LG one of the prerequisites for contributing to the vision is to improve its analytical power and to enhance its capacity to provide information and communication services.

Antimicrobial Resistance — The second item covered was the growing threat of antimicrobial resistance (AMR) across drug classes and around the world as background and justification for the APHCA workshop on hosting of the international workshop on the use of antimicrobials in livestock production and antimicrobial resistance in the Asia-Pacific region. Given AMR is a transboundary risk, which no country can successfully manage on its own, taking stock of the extent of AMR in the region and initiating collective action for AMR management should become one of APHCA's work areas. FAO-RAP is co-funding the workshop through TCP/RAS/3404 and will be able to provide some funds through the TCP for specific follow-up activities.

Zoonoses – One of the topics covered in depth at the Livestock Policy Forum held in Bangkok in August 2012 was 'human health risks at the animal-human interface'. A review of studies on the burden of human disease attributable to zoonoses suggests that gastrointestinal zoonoses are causing considerable human suffering in South and Southeast Asia while food-borne parasitic diseases are high on the list of priority

zoonoses in East and Southeast Asia. The estimates of the human disease burden associated with leptospirosis and brucellosis are beset with high degrees of uncertainty. Given that gastrointestinal zoonoses are to a large extent caused by agents which are among those developing relatively high levels of AMR, zoonoses, food safety and AMR containment might warrant more attention by APHCA than has hitherto been the case.

Feed Assessment Systems – Population growth, urbanization, and income growth are driving enormous increases in demand for foods of animal origin. The capacities of existing livestock production systems are being stretched due to increasing demands for livestock feeds relative to availabilities. This situation is particularly acute in developing countries. Accurate assessments of current and future supplies and demands for livestock feed are needed for national food security policy and planning, as well as the setting of environmentally sustainable stocking rates. Feed resources should be assessed and monitored to provide information for the development and implementation of policies that will contribute to the sustainable growth of national livestock sectors. Given rising feed costs and likely underutilization of alternative feed resources, APHCA should consider providing an institutional framework for the establishment of National Feed Assessment Systems in support of sustainable and 'feed secure' livestock production.

Livestock Policy Network – The issues listed above are but a small sample of the challenges posed and confronted by the livestock sector and livestock industries in the Asia-Pacific countries will have to proactively adapt to the emerging social, environmental and economic changes. To best guide livestock sector development, policy-makers need to understand the different options with their pros and cons in a decision-making context strongly influenced by regional interdependencies. Economics and ecology are transcending national borders and an understanding of what is happening at the global, regional, national and local levels is critical to relevant and appropriate decision making. Timely access to unbiased and broad-based analysis of issues and information exchange among peers is thus becoming increasingly important, particularly in the context of an over-load of information and increased lobbying by commercial interests. To address the growing information needs of policy makers, the APHCA secretariat proposed the establishment of a highly proactive livestock policy network (LPN). In the first phase, to funded by a regional TCP, a network of specialists would be established, that can quickly generate policy advice as issues emerge. Furthermore, the LPN would work with groups of countries to produce multi-country / sub-regional policy studies to identify approaches and solutions to common problems and challenges. Finally, the LPN will provide training and capacity-building for livestock institutions in the region, particularly national livestock departments. The Secretariat sought feedback on the proposal, which, if initiated through TCP funds, would require countries to request FAO action in this regard.

Proposed 2013 Workplan and Budget: The Secretary presented the proposed workplan and budget for 2013 by five thematic thrusts: (i) smallholder dairy

development, to expand into dairy goats – US\$35,000 (ii) zoonoses, food safety and AMR – US\$30,000 (iii) the development of feed assessment systems – US\$20,000 (iv) information dissemination and APHCA positioning – US\$30,000, and (v) support to the development of a detailed proposal for a livestock policy network – US\$10,000. The total budget requested amounts to US\$125,000. The operational breakdown as well as FAO's anticipated contributions to the workplan, estimated at US\$165,000, are detailed in APHCA 2012/06.

Thailand proposed to host two inter-related brucellosis activities on proficiency testing in 2013, up to US\$30,000 and to be co-funded by OIE-Asia Pacific. Part of the APHCA contributions would derive from unspent 2012 funds earmarked for this activity.

#### Wednesday, 24 October 2012, morning

- Endorsements: Delegates endorsed the following requests made by the Secretariat on Monday, 22 October:
  - a. Accumulated interest up to 31.12.2011 can be moved into the APHCA cash account at disposal for APHCA activities,
  - b. Unspent 2012 funds can be used in 2013 to complete agreed 2012 activities,
  - Brucellosis proficiency testing and related workshop to be conducted drawing on unspent funds from 2012 (app US\$15,000) and additional funding for 2013 (app. US\$15,000) as joint FAO-APHCA/OIE-Asia-Pacific activity in 2013,
  - d. Workplan for 2013 to incorporate brucellosis activities as separate line item bringing total approved budget to US\$140,000;
  - e. Member countries replenish / establish the respective NCFs and report on the status at the next Session.
- Summary and recommendations from the AMU & AMR Workshop: The International Workshop on the Use of Antimicrobials in Livestock Production and the Risks from Antimicrobial Resistance in the Asia–Pacific Region was held in Negombo, Sri Lanka, on 22–23 October 2012 in conjunction with the 36<sup>th</sup> APHCA Session.

In the first session of the workshop, Dr J. Otte outlined the objectives of workshop and introduced the subject experts who addressed the workshop. Professor J. Wagenaar presented a keynote address on the epidemiology and impact of antimicrobial resistance (AMR) and the links between antimicrobial use (AMU) in livestock and AMR in humans.

In the second session, APHCA delegates then presented short country reports on AMU and AMR in their respective countries. In the third session, subject specialists presented a series of five case studies on AMU and AMR in animals (including

livestock and aquatic animals) in the Asia–Pacific region, providing data and information of relevance to APHCA delegates.

In the fourth session, Professor D. Pfeiffer gave a presentation on systems for monitoring and integrated surveillance of AMU and AMR, and Professor Wagenaar then gave a presentation that explored alternatives to antimicrobials (ATA). Dr A. Adara–Kane outlined WHO and FAO initiatives to reduce risks from AMR and Dr T. Myint outlined OIE initiatives to promote the responsible and prudent use of antimicrobials.

In the final session of the workshop, delegates and resource persons split into two working groups, facilitated by APHCA staff, that explored what actions APHCA member countries could take to help reduce the risks from AMR. Each working group reported back to a plenary session and the outputs were synthesised into a common list of potential actions in an approximate order of priority. Delegates acknowledged the importance of AMR and agreed that the international workshop was a useful and timely reminder of the need for animal health authorities in the Asia—Pacific region to give greater attention to AMU and AMR.

Delegates noted that there is a wide variation in the awareness of and capacity to manage the risks from AMR across APHCA member countries. However, they agreed that the case studies presented during the workshop demonstrated both that AMR was a problem in countries in the Asia—Pacific region and that appropriate action could and should be taken to ensure prudent use of antimicrobials in animals to reduce the risks from AMR. Delegates recognised that although AMR is a global problem local action in each APHCA member country was needed to underpin regional and global risk reduction measures.

The synthesis of feasible local actions identified in the workshop is shown in Figure 1. Delegates noted that it was not feasible to undertake all of these quickly but recognised that it was important to undertake a situational analysis to understand the roles and motivations of all stakeholders in antimicrobial value chains in their respective countries. They noted that AMU is not just a technical issue and that addressing it and the risks from AMR also required consideration of social, economic, environmental, ethical and policy factors.

Delegates recognised the need to work to establish, where not already in place in their respective countries, a broadly based multidisciplinary national taskforce on AMU and AMR. They noted that having a broadly based multidisciplinary and cross-sectoral National Taskforce on Antimicrobials would help to facilitate a number of other actions identified (e.g. increasing awareness). They also noted that some support was available from WHO for countries to take action to reduce risks from AMR, and that both FAO and OIE produce useful guidance including a range of standards and guidelines for good practice.

Delegates recognised the need for relevant legislation and regulatory frameworks, including compliance capacity, which they noted was limited in a number of

countries in the Asia–Pacific region. However, they recognised that developing or reviewing legislation was longer-term action that first required broad consensus on national policy. Delegates also recognised the need for capacity-building (of both human resources and laboratory infrastructure) for monitoring AMU and surveillance of AMR, but acknowledged that this was also an action that would require longer-term planning and investment.

Delegates agreed that they would each progress a number of local actions identified in the workshop that were relevant to their respective countries, and report progress at the next APHCA meeting. APHCA Secretariat is requested to pursue the issue with the three countries that were not represented at the Session / Workshop.

Delegates noted that some of the local actions identified in the workshop actions would require external funding support, particularly in terms of longer-term actions such as capacity-building. They acknowledged that it would be useful for some priority be given to exploring mechanisms for obtaining external funding to support undertaking some longer-term actions in a number of APHCA member countries.

Delegates agreed that it would be useful for APHCA to facilitate obtaining external funding to support undertaking some longer-term actions in a number of APHCA member countries.

## Figure 1: Local in-county actions to reduce risks from AMR (as identified in the workshop)

- 1. Undertake a *situational analysis* (to improve understanding of what is occurring with AMU and AMR) to understand the roles and motivations of all stakeholders in antimicrobial value chains in their respective countries;
- Establish a National Task Force on Antimicrobials that is multidisciplinary and cross-sectoral to provide a forum to lead policy development and support action on AMU and AMR;
- 3. Improve *awareness* at different levels (including farmers and farmer organizations; veterinarians, paraveterinarians, veterinary faculty staff members; policy-makers; consumers and civil society);
- 4. Develop, review and improve *practical legislation and regulatory frameworks*, including compliance capacity, for AMU and AMR:
  - Develop national policy;
  - Develop guidelines and regulations to encourage responsible and prudent use of antimicrobials (e.g. on prescription for both animal and human AMU).
- 5. Build *capacity* (of both human resources and laboratory infrastructure) for monitoring AMU and surveillance of AMR:
  - Review current national capacity;
  - Explore options for capacity-building to fill gaps identified.
- 6. Undertake monitoring and surveillance of AMU and AMR:
  - Collect data on AMU (e.g. types and of volume of antimicrobials used, purpose of use);

- Design and undertake targeted surveillance for AMR;
- Explore options for developing a national programme for monitoring AMU and surveillance of AMR.
- 7. Promote *alternatives to AMU*, particularly improved infection control, good husbandry practices, and farm biosecurity;
- 8. Develop and implement communications and public *awareness* on AMU and AMR.
- ➤ Venues and Dates of the 37<sup>th</sup> and 38<sup>th</sup> Sessions: As agreed at the 35<sup>th</sup> Session, the 2013 Session will be held in Punakha or Thimphu, Bhutan, tentatively in the last week of September 2013.
  - Government of Myanmar, through its delegate, proposed to host the 38<sup>th</sup> Session in Myanmar, venue to be confirmed.
- > Any Other Business: No other business was raised.
- Adoption of the Minutes of the 73<sup>rd</sup> Executive Committee Meeting and the 36<sup>th</sup> APHCA Session: The Minutes and the Session Report were approved.
- ➤ Closure: The Chairperson thanked the APHCA Secretariat and all the delegates for their hard work and attendance. The Session was closed at 10:30.

## **Summary Statement of APHCA Account (APHCA 2013/04)**

## Cash Balance as of 1 January 2013

TRUST FUND No. 9167.00 - MTF/INT/005/MUL

Funds received up to 31.12.2011 3051 Contributions received 3052 Cumulative interest earned***		<b>US\$</b> 2,414,635 90,453
	Total	2,505,088
Funds received in 2012		
3051 Contributions received		75,871
3052 Interest earned in 2012*****		397
	Total	76,269
Funds received up to 31.12.2012		
3051 Contributions received		2,490,507
3052 Cumulative interest earned***		90,850
	Total	2,581,357
Expenditures		
Expenditures up to 31.12.2011		2,191,572
Expenditures in 2012 (Jan. to Dec.)		38,125
	Total	2,229,697

<sup>\*\*\*</sup> N.B. Interests, although received into the account, **cannot** be spent without approval of APHCA members. Therefore the effective cash balance is calculated on the contributions received (without interest) minus expenditures.

Effective cash balance (without interest earned) as of 01.01.2013

## **Expenditures in 2012**

Budget line	US\$
5012 Salaries General Service	-10,486
5013 Consultants	166
5014 Contracts	0
5020 Locally Contracted Labour	23
5021 Travel	40,710
5023 Training	608
5024 Expendable Procurement	453
5026 Hospitality	1,155
5028 General Operating Expenses	5,496
Total Expenditure	38,125

260,810

# Status of Contributions Oracle Activity: TF RAPXD TFAA97AA89142, Status as of 31.12.2012

Member	Outstanding	Contribution	Contributions	Outstanding
Country	31/12/2011	due for 2012	received 2012	31/12/2012
Australia	0.00	10,724.00	10,724.00	0.00
Bangladesh	35,792.00	6,502.00	6,502.00	35,792.00
Bhutan	0.00	2,128.00	2,128.00	0.00
India	323.05	10,724.00	10,724.00	0.00
Indonesia	0.00	6,502.00	6,502.00	0.00
Iran	6,502.00	6,502.00	6,502.00	6,502.00
Korea DPR	0.00	2,128.00	0.00	2,128.00
Lao PDR	0.00	2,128.00	0.00	2,128.00
Malaysia	0.00	6,502.00	6,502.00	0.00
Mongolia	0.00	2,128.00	2,128.00	0.00
Myanmar	0.00	2,128.00	2,128.00	0.00
Nepal	(2,128.00)	2,128.00	0.00	0.00
Pakistan	6,593.15	6,502.00	0.00	13,095.15
PNG	(2,119.00)	2,128.00	0.00	9.00
Philippines	0.00	6,502.00	6,502.00	0.00
Samoa	(54.00)	2,128.00	2,202.14	-103.14
Sri Lanka	25.00	6,502.00	6,502.00	25.00
Thailand	0.00	6,502.00	6,502.00	0.00
Total	44,934.20	90,488.00	75,871.19	59,576.01

Oracle Activity: TF RAPXD TFAA97AA89142, Status as of 31.08.2013

Member	Outstanding	Contribution	Contributions	Outstanding
Country	31/12/2012	due for 2012	received 2013	31/08/2013
Australia	0.00	10,724.00	10,724.00	0.00
Bangladesh	35,792.00	6,502.00		42,294.00
Bhutan	0.00	2,128.00	2,128.00	0.00
India	0.00	10,724.00		10,724.00
Indonesia	0.00	6,502.00		6,502.00
Iran	6,502.00	6,502.00		13,004.00
Korea DPR	2,128.00	2,128.00	2,128.00	2,128.00
Lao PDR	2,128.00	2,128.00		4,256.00
Malaysia	0.00	6,502.00		6,502.00
Mongolia	0.00	2,128.00	2,128.00	0.00
Myanmar	0.00	2,128.00		2,128.00
Nepal	0.00	2,128.00	2,128.00	0.00
Pakistan	13,095.15	6,502.00		19,597.15
PNG	9.00	2,128.00		2,137.00
Philippines	0.00	6,502.00	6,502.00	0.00
Samoa	-103.14	2,182.00	1,999.86	25.00
Sri Lanka	25.00	6,502.00	6,527.00	0.00
Thailand	0.00	6,502.00	6,502.00	0.00
Total	59,576.01	90,542.00	40,766.86	109,297.15

<sup>\*</sup>Note: Outstanding up to 31.12.2010: U\$\$23,173.48; outstanding up to 31.12.2011: U\$\$44,932.20; outstanding up to 31.12.2012: 59,576.01

## Approved Budget for 2013 and Expenditures to 31.08.2013

Budget line	Approved	Expended on	
	budget	31.08.2013	Balance
5011 Salaries Prof.	0	0	0
5012 Salaries GS	25,000	16,986	8,014
5013 Consultants	26,000	18,134	7,866
5014 Contracts	30,000	0	30,000
5020 Locally Contracted Labour	1,000	-653	1,653
5021 Travel	46,000	28,768	17,232
5023 Training	5,000	1,129	3,871
5024 Expendable Procurement	1,000	1,876	-876
5025 Non-expendable Procurement	0	0	0
5026 Hospitality	2,000	0	2,000
5028 General Operating Expenses	4,000	-3,895	7,895
Total	140,000	62,345	77,655

## Scale of Contributions for 2013

Member Country	Amount (US\$)*
Australia	10,724.00
Bangladesh	6,502.00
Bhutan	2,128.00
India	10,724.00
Indonesia	6,502.00
Iran	6,502.00
Korea DPR**	2,128.00
Lao PDR	2,128.00
Malaysia	6,502.00
Mongolia	2,128.00
Myanmar	2,128.00
Nepal	2,128.00
Pakistan	6,502.00
PNG	2,128.00
Philippines	6,502.00
Samoa	2,128.00
Sri Lanka	6,502.00
Thailand	6,502.00
TOTAL	90,488.00

<sup>\*</sup> Note: This scale of contributions has been in effect since 2003

<sup>\*\*</sup> Note: Korea DPR became a member of APHCA effective 2010

## **Activity Report (APHCA 2013/05)**

#### Introduction

The following is a general overview of the activities carried out by the RAP livestock group in the livestock sector in the APHCA region – i.e. not limited to APHCA member countries – since the last Session in Negombo, 20-24 October 2012. The activities are funded from a variety of sources, such as the APHCA trust fund, FAO's regular programme (RP), FAO's technical cooperation programme (TCP) as well as unilateral and multilateral donor trust funds. The RAP Livestock group supports and is supported by colleagues from RAP ECTAD and FAO HQ and also greatly benefits from support and links provided by the FAO in countries representations.

In accordance with FAO's overall strategic objectives, the Asia-Pacific livestock programme aims to maximize livestock's contribution to attaining food security and reducing poverty while at the same time enhancing resilience and sustainability and reducing health risks to humans and animals (including the threat from antimicrobial resistance).

FAO's work builds on strong partnerships with international 'sister' organizations through the regional and sub-regional offices of OIE, and the WHO offices for Southeast Asia (SEARO) and for the Western Pacific (WIPRO) and in close consultation with national counterpart institutions of Member countries, fostered through FAO country offices.

The Animal Production and Health Commission for Asia and the Pacific, APHCA, provides a long-standing forum for information exchange, mutual support and coordination of collective action in the livestock sector.

## Personnel (RAP Livestock Group)

- Joachim Otte, Senior Animal Production and Health Officer and Secretary of APHCA
- Carolyn Benigno, Animal Health Officer
- Vinod Ahuja, Livestock Policy Officer
- Vishnu Songkitti, APHCA Liaison Officer
- Yupaporn Simuangngam, APHCA IT Clerk
- Tuanchai Laisakun, Support Staff

## Field Projects Supported by RAP Livestock Group

#### FAO Technical Cooperation Programme (TCP) - National Projects

- > TCP/AFG/3403 (TCPF) Afghanistan Poultry Policy and Strategy Development [VA]
- ➤ TCP/BGD/3302 Establishment of Livestock Health Care System at Kotalipara and Tungipara Upazilas in the Gopalgonj District [CB]
- ➤ TCP/IND/3302 & UTF/IND/185 A Strategy and an Action Plan for an Animal Identification and Traceability System for India (completed Q3 2013) [VA]
- ➤ TCP/IND/3301 (TCPF) Strengthening Smallholder Livestock Rearing and Fodder Producing Agro-ecosystem Management (completed Q2 2013) [JO]
- ➤ TCP/IND/3402 Support for Piloting Integrated Smallholder Livestock Rearing Interventions in two States of India, and Documenting and Disseminating Successful Smallholder Livestock Rearing Interventions under the South Asia Pro-Poor Livestock Policy Programme [JO]
- ➤ TCP/INS/3302 Enhanced Coordination of Control Efforts, Capacity Building, Awareness Raising and Rapid Outbreak Response to Control Rabies in Bali, Indonesia (completed Q2 2013) [CB]
- TCP/MDV/3401 (TCPF) Formulation of Project Proposal: Development of Domestic Egg Industry in the Maldives (completed Q2 2013) [VA]
- > TCP/MDV/3402 Support for the Development of a Domestic Egg Industry in the Maldives [VA]
- ➤ TCP/MYA/3402 (TCPF) Formulation of Project Proposal: Improved Farmer Livelihoods through Improved Livestock Disease Control and Supply Chains (completed Q3 2013) [JO]
- ➤ TCP/MYA/3402 (TCPF) Formulation of Project Proposal: Animal Feeding Strategies for Improved Livestock Production in Myanmar [VA]
- ➤ TCP/THA/3306 Emergency Assistance to Support the Recovery of Agriculture-based Livelihoods Systems of Flood-affected Farmers (completed Q4 2012) [JO]
- ➤ TCP/THA/3401 Enhancement of Beef Productivity through Animal Identification and Traceability [CB]
- ➤ TCP/VIE/3302 (TCPF) Formulation of Project Proposal: Developing a Livestock Policy Analysis and Monitoring System in Vietnam [VA]

#### FAO Technical Cooperation Programme (TCP) - Regional Projects

- TCP/RAS/3306 Cross-border Trade and TAD Risk Reduction (with a special focus on FMD) (completed Q1 2013) [CB]
- TCP/RAS/3309 Enhancing Milk Consumption and Livelihoods through School Milk Programmes (Bangladesh, Myanmar and Thailand) [VA]

- ➤ TCP/RAS/3401 Enhancing Regional Coordination of FMD Control (SAARC and ASEAN) [CB]
- ➤ TCP/RAS/3404 (TCPF) Livestock Production and Antimicrobial Resistance in Asia with an Emphasis on the SAARC Sub-Region [JO]
- TCP/RAS/3406(E) Emergency Assistance for Surveillance of Influenza A (H7N9) Virus in Poultry and Animal Populations in Southeast Asia [CB]
- TCP/INT/3402(E) Emergency Support to Global and Coordinated Response to Influenza A (H7N9) Virus in Poultry and Other Animals [CB]

#### Bi-lateral and Multi-lateral Donor Funding - National

- ➤ UTF/AFG/079/AFG Dairy Industry Development in Kabul, Logar and Parwan provinces [VA]
- ➤ GCP/BGD/048/USA Improving food security of women and children by enhancing backyard and small-scale poultry production in the Southern Delta Region in Bangadesh [VA]
- ➤ MTF/BGD/052/RBK Linking School Milk with Smallholder Dairy Development in Tala, Sathkira, Bangladesh [VA]
- ➤ GCP/CMB/039/EC Micro and Small Enterprise Development to Achieve Food Security, Food Safety and Self-Reliance for Urban Poor in Phnom Penh [JO]
- ➤ OSRO/CMB/101/EC Improving Food Security and Market Linkages for Smallholders in Otdar Meanchey and Preah Vihear Provinces in Cambodia [JO]
- ➤ OSRO/LAO/101/BEL Emergency assistance to restore the livelihoods of vulnerable farming families affected by floods in Khammouan, Savannakhet and Champassack provinces in Lao PDR [JO]
- ➤ UTF/LAO/018/LAO Technical Assistance for the Development of the SPS-related Legal Framework in the Lao People's Democratic Republic [CB]
- UTF/MON/009/MON Mongolia Integrated Livestock-based Livelihoods Support Programme (ILBLSP) [JO]
- ➤ UNTS/THA/033/UNO United Nations Joint Programme on Integrated Highland Livelihood Development in Mae Hong Son Province [VS]

#### Bi-lateral and Multi-lateral Donor Funding – Regional

- GCP/RAS/252/IFA South Asia Pro-Poor Livestock Policy Programme (completed Q4 2012) [JO]
- MTF/RAS/CFC/259 Improving the Bargaining Power and Sustainable Livelihoods through the Enhancement of Productivity and Market Access in Dairy (Bangladesh, Myanmar and Thailand) [VA]

- ➤ GCP/RAS/244/ITA Sub-regional Environmental Animal Health Management Initiative for Smallholder Production in Southeast Asia, Phase 3 [CB]
- ➤ GCP/RAS/283/ROK FMD Control in Southeast Asia (Cambodia, Lao PDR and Vietnam) through Application of the Progressive Control Pathway [CB]
- ➤ OSRO/GLO/102/AUL Partnership on Global Animal Health and Biosecurity Initiatives (Bangladesh, Philippines, Thailand, Vietnam) [CB]
- ➤ OSRO/RAS/901/EC Improvement of Regional Capacities for Prevention, Control and Eradication of Highly Pathogenic and Emerging Diseases including Highly Pathogenic Avian Influenza in the ASEAN and SAARC Countries [CB]
- ➤ GCP/RAS/279/JPN Information Sharing for Transboundary Animal Diseases in Asia [CB]
- ➤ OSRO/INT/02/USA IDENTIFY: Support for Strengthening Animal Health Laboratory Capacities in Hot Spot Regions to Combat Zoonotic Diseases that Pose a Significant Public Health Threat [CB]
- OSRO/INT/001/USA Characterizing Influenza Viruses Posing Risks as the Next Global Pandemic [CB]
- USAID supported projects on HPAI (Bangladesh, Cambodia, China, India, Indonesia, Myanmar, Nepal, Vietnam, Regional) [CB]

#### **Pipeline Projects**

- ➤ TCP, China Developing Prevention and Control Technologies for African Swine Fever (ASF) in China [CB].
- TCPF, Maldives Animal Quarantine Improvement [CB]
- ► GCP, Myanmar Improved Farmer Livelihoods through Improved Animal Health and Production Services [JO]
- TCPF, Sri Lanka Dairy Feeding in Sri Lanka [tbd]
- ➤ TCP, Vietnam Development of a Livestock Policy Analysis and Monitoring System in Vietnam [VA]

## Meetings, Workshops and Events (Co-)Organized

- ➤ 29 November 2012, Thailand, Bangkok, Planning Dairy Development Programmes, Symposium held at the 15<sup>th</sup> AAAP Congress [VA]
- ➤ 14-18 January 2013, Cambodia, Phnom Penh, Training Course on Economywide Assessment of High Impact Animal Diseases in Cambodia [JO]
- → 4-6 March 2013, Fiji, Nadi, 2<sup>nd</sup> FAO/OIE/SPC Sub-regional Meeting on GF-TADs for SPC [CB]

- ➤ 12-14 March 2013, Thailand, Bangkok, Preliminary Meeting on Reporting Indicators and National Focal Points Meeting of the Sub-regional Environmental Animal Health Management Initiative (EAHMI) for Enhanced Smallholder Production in Southeast Asia, GCP/RAS/244/ITA [CB]
- 23-26 April 2013, Thailand, Chiang Mai, Mid-Term Review and Second Regional Dairy Task Force Meeting [VA]
- ➤ 14-15 May 2013, Thailand, Bangkok, APHCA Expert Workshop 'Towards Standardization and Harmonization of Monitoring of AMU in Livestock and AMR in Livestock-associated Micro-organisms in the Asia-Pacific Region' [JO, VS]
- > 1 June 2013, Thailand, Bangkok, ASEAN Dairy Symposium and WMD [VA, VS]
- ➤ 4-6 June 2013, Thailand, Bangkok, Workshop 'Understanding and Integrating Gender Issues into Livestock Projects and Programmes' [CB]
- ➤ 12-20 July 2013, Thailand, Bangkok, preparatory meeting for QC/QA of brucellosis laboratory at NIAH-Thailand and proficiency testing of 16 laboratories under the Joint FAO-APHCA/OIE Brucellosis Diagnosis and Control Programme in the Asia-Pacific Region [VS]
- ➤ 13-15 August 2013, Thailand, Bangkok, Regional Workshop on 'Animal Feed Resources and their Management in the Asia-Pacific Region' [JO, VS]
- ➤ 27-30 August 2013, Thailand, Bangkok, Agenda of Action Meeting (Waste to Worth component [VA, VS]
- ➤ 18-19 September 2013, Manila, Philippines, Environmental Animal Health Management Initiative (EAHMI) Conference [CB]
- ➤ 22-26 September 2013, Thimphu, Bhutan, 37<sup>th</sup> APHCA Session and Regional FAO-APHCA OIE Workshop on Zoonoses, Food-borne Diseases and Antimicrobial Resistance [CB, JO, VA & VS]

## Congresses, Symposia, Meetings and Workshops Attended

- ➤ 13-14 November, 2012, Tokyo, Japan, First Coordination Committee Meeting of OIE/JTF Project for FMD Control in Asia [CB]
- ➤ 26-28 November 2012, Bali, Indonesia, The Third Regional Workshop on Multi-Sectoral Collaboration on Zoonoses Prevention and Control [CB]
- ➤ 16-18 January 2013, Bangkok, Thailand, 38<sup>th</sup> International Conference on Veterinary Science [JO]
- ➤ 29 January 2 February 2013, Bangkok, Thailand, Prince Mahidol Award Conference 2013 [JO]
- ➤ 19-22 March 2013, Singapore, 19<sup>th</sup> Meeting of the OIE Sub-Commission for FMD Control in SEA and China [CB]

- > 4 April 2013, Hanoi, Viet Nam, Viet Nam Agricultural Outlook Conference
- ➤ 23 April 2013, Tokyo, Japan, OIE Expert Group Meeting on Swine Influenza in Asia Pacific Region [CB]
- ➤ 26 April 2013, Bali, Indonesia, Bali Rabies Control Stakeholders Lessons Learnt Workshop (FAO TCP Project 3302 I) [CB]
- ➤ 2-3 May 2013, Thailand, Bangkok, H7N9 Technical and Programmatic Coordination Meeting [JO]
- ➤ 16 July 2013, Tokyo, Japan, 4<sup>th</sup> EU-HPED Steering Committee Meeting [CB]
- > 17-18 July 2013, Tokyo, Japan, 7<sup>th</sup> Regional Steering Committee Meeting of GF-TADs for Asia and the Pacific [CB]
- > 27-29 July, China, Lanzhou, 4<sup>th</sup> International Conference on Sustainable Animal Agriculture for Developing Countries, SAADC2013 [JO]
- ➤ 1-3 August 2013, Manila, Philippines, Technical Consultation for AMR Surveillance in the WHO Western Pacific Region [CB]
- 21-23 August 2013, Luang Prabang, Lao PDR, 16<sup>th</sup> SEACFMD National Coordinators Meeting [CB]
- ➤ 26 August 2013, Bangkok, Thailand, Training on AMR in Foodborne Pathogens for ASEAN Universities (at Chulalongkorn University) [JO]
- > 2-6 September 2013, Nadi, Fiji, 15<sup>th</sup> Australasia/Oceania CVA Regional Conference [CB]

#### **Commissioned Studies**

- ➤ Trends in the Emergence of Swine Pathogens, Royal Veterinary College [JO] (completed)
- A Study of Patterns and Trends of Regional Trade in Live Animals, Livestock Products and Animal Feed (Ingredients) in the GMS Countries and their Implications for Regional Food Security; Chiang Mai University [JO, VA] (completed)
- Cambodia Fodder Resources, CELAGRID, Cambodia [CB] (completed)
- ➤ Cambodian Livestock Breeds and Guidelines on Management of Animal Genetic Resources; Royal University of Agriculture, Cambodia [CB] (completed)
- Study of Animal Protein Consumption Patterns in Rural and Urban Areas of Cambodia to Develop a Predictive Model of Future Demand; Royal University of Agriculture, Cambodia [CB] (completed)
- Market Supply Chain Survey in Selected Provinces: Quang Ninh, Hai Duong, Quang Nam and Dong Thap, Vietnam; Research Development Center for Agro-foresty and Fisheries, Vietnam [CB] (completed)

- National Survey of Veterinary Check Points, Infrastructure and Disease-Free Farm Locations in Vietnam; Department of Animal Health, Vietnam [CB] (completed)
- Desk study Review of Culled Animal Disposal Regulations and Practices in Vietnam; Hanoi University of Agriculture [CB] (completed)
- Mapping and Description of Duck Markets and Duck Market Dynamics in Seven Provinces of Cambodia; National Veterinary Research Institute, Cambodia [CB] (completed)
- ➤ A Study on Cheese Consumption Behavior in Bangkok and Chiang Mai; DLD team [VA] (completed)
- ➤ Linking school milk with smallholder dairy development strategy: Thai experience and design considerations for a pilot project in Bangladesh; M. Jabbar and V. Ahuja [VA] (completed)
- Myanmar School Milk Nutrition Programme Review; B. Dugdill [VA] (completed)
- Changing Consumption Patterns of Livestock Products; A. Kundu [VA] (ongoing)
- An Analytical Framework for Integrated Animal Disease Impact Assessment: Applications to FMD in the Greater Mekong Sub-Region; UC Berkeley and Norwegian Institute of International Affairs [JH, JO] (ongoing)
- ➤ A Review of Antimicrobial Resistance in Bacterial Micro-Organisms Isolated from Livestock and Livestock Products in the Asia-Pacific Region; Chulalongkorn University [JO] (ongoing)

## **Publications (hard copy)**

- Proceedings of the 1<sup>st</sup> Asia Dairy Goat Conference (2012) (Conference Proceedings)
- Frequently asked questions on pig biosecurity and disease reporting (2012) (Guide)
- Guide to prevent and control porcine reproductive and respiratory syndrome (2012) (Guide)
- ➤ Handbook on swine health field surveillance (2012) (Guide)
- Asian Livestock Challenges, Opportunities and the Response (2013) (Conference Proceedings)
- Utilization of Fruit and Vegetable Wastes as Livestock Feed for Generation of Other Value-Added Products (RAP Publication 2013/04)

## **Smallholder Dairy Development Activities**

The project Smallholder Dairy Development in Bangladesh, Myanmar and Thailand commenced in February 2011 with official launch meetings in Bangkok and Chiang Mai,

Thailand. This project is the first intervention under the Strategy and Investment Plan for Smallholder Dairy Development in Asia – *a glass of Asian milk every day for every Asian child* – developed by APHCA member countries in 2008. The project in Bangladesh, Myanmar and Thailand consists of three mutually reinforcing projects. These are:

- Smallholder Dairy Development in Bangladesh, Myanmar and Thailand: Improving the Bargaining Power and Sustainable Livelihoods through the Enhancement of Productivity and Market Access in Dairy (MTF/RAS/CFC/259) – funded by the Common Fund for Commodities (CFC)
- Enhancing Milk Consumption and Livelihoods through School Milk Programmes Linked to Smallholder Dairy Operations (TCP/RAS/3309 (D)) – funded by FAO, and
- Asia Dairy Network the way forward –funded by APHCA

A mid-term review of the project was conducted in March-April 2013 and the findings of the review were presented at the Regional Dairy Task Force meeting held in Chiang Mai on 23-25 April 2013. The review concluded that overall, there is solid evidence the project has made good progress and there is compelling evidence of strong ownership of the project across all three countries and along the entire dairy value chain where the Smallholder Dairy Development Project (SDDP) intervenes.

The project has promoted a dairy extension model in Thailand with support from the Regional (DLD) Livestock Office, Animal Nutrition Research Centre and Chiang Mai University. The model has been appreciated by all stakeholders and is already showing results in Thailand in terms of improved milk quality. Results also indicate that replacing expensive concentrates with high quality / lower cost green forage in Thailand can produce a profitable productivity increase response. This has been possible due to close coordination and communication between Chiang Mai University, Regional Livestock Office, Animal Nutrition research Centre, the participating cooperatives and FAO. Due to this coordinated effort the Royal Thai Government conferred the 2012 Public Service award to this project.

The pilot school milk nutrition schemes in Myanmar started in Mandalay and Yangon in August 2012 with supply to over 5 000 primary school children financed by private sector sponsors, including milk processors and other trading companies. These schemes use local milk and are the first in the country. A further scheme funded by the packaging company Tetra Pak through LBVD using UHT milk imported from Thailand was piloted for six weeks. Both schemes plan to scale up during the coming academic year starting July 2013 to serve about 70 000 children. With financial contributions from local dairy processors, Myanmar Dairy Association has established a Foundation Trust Fund in support of school milk activities and international private sector processors such as Friesland Campina have pledged support for the programme. Recently, Mandalay regional government announced a soft loan provision of 100 million Myanmar Kyats for local private processors who participate in school milk programmes. Overall the

programmes have been considered a great success by all stakeholders and early indications are that the programmes are making positive impact on children's health and school attendance. The Myanmar Dairy Association received the World Food Day award in 2012 for SDDP activities under the school milk component.

In Bangladesh the school milk activities have progressed also well with new partners – the Bangladesh Milk Producers' Union Limited (better known by its brand name 'Milk Vita') and Rabobank – joining the programme. Official pilot schemes benefitting 4 000 children are scheduled to be launched on August 24, 2013.

The review further noted that the project continues to benefit from the high level of commitment of all three Governments and keen support from dairy industry stakeholders across all three countries with Thailand especially providing more support, e.g. for improved dairy cow feeding and the pilot school milk schemes. Increasingly, partners are making cash as well as in kind contributions to the SDDP.

Based on the outcome of the mid-term review, the project will focus on following key priority activities during the third year of implementation.

**Bangladesh:** (i) mobilising farmers, reinforcing farmer groups and enhancing dairy service delivery (dairy extension system); (ii) introducing rapid platform quality testing and monitoring systems at selected milk collection points and chilling centres of the Milk Vita partner; (iii) piloting and documenting the school milk nutrition scheme.

**Myanmar:** (i) strengthening farmer groups and enhancing sustainable dairy service delivery (dairy extension system); (ii) installing equipment at MPOs/MPUs; (iii) documenting, scaling-up and sustaining the pilot school milk nutrition schemes.

**Thailand:** (i) dairy feeding interventions and enhancement dairy extension service provision; (ii) regional training activities at Chiang Mai Dairy Training Centre; (iii) instruments for sustaining the Regional Dairy Training Centre.

**Regional:** (i) reinforcing training along the entire value chain from cow to consumer training, including more country-to-country learning and training events, and advocacy; (iii) fully operationalising the Asia Dairy Network (I) (iv) embedding a dairy cow key performance indicator tool into the milk production enhancement component of the project.

Activities under the Asia Dairy Network have progressed as well. The network was launched at a specially organized side event symposium—Planning Dairy Development Programmes in Asia—under the auspices of 15<sup>th</sup> AAAP (Asia Australasia Association of Animal Production Societies) Congress held in Bangkok in November 2012. A website <a href="https://www.dairyasia.org">www.dairyasia.org</a> has also been launched and a distribution list FAO-DairyAsia-L has been created on the FAO list server. Through these platforms, members now receive regular updates on project activities and dairy related developments in the region.

### **Animal and Veterinary Public Health Activities**

Infectious diseases of animals pose a long-term threat to livestock production in the region and the wider world, as well to human health. Changing livestock production systems, combined with greater movement of people, animals, goods and services, technology and investments, are challenging regulatory authorities. These not only have to keep abreast of these changes but are also required to make the necessary adjustments, such as defining and enforcing good farming practices and implementing timely, effective and efficient disease control measures.

Livestock sector developments in the Asia-Pacific region are creating a fertile ground for the emergence of animal diseases, some of which may have zoonotic potential, and call for increased investments in animal health management capacities. Animal health management strategies needs to be informed by a good understanding of the differential and localized costs of disease outbreaks, the role of production and marketing systems in generating and dispersing pathogens, and the role of policymakers and regulatory authorities in addressing these issues. Better information about the direct and indirect costs of animal diseases for producers, industries, consumers, as well as to the economy as a whole needs to be generated and translated into greater awareness and commitment to disease control by all concerned.

To address above issues, FAO carries out a number of activities in the Asia-Pacific region which, functionally, broadly fall into the following main areas: (i) strategy / policy guidance, (ii) coordination, (iii) information generation and knowledge sharing, (iv) technical capacity building, and (v) support to field programme implementation.

#### **Strategy/Policy Guidance**

Animal disease management in Asia is generally weak due to poor regulatory systems and heterogeneity in the capacity (and motivation) of (local) animal health services to detect and respond to disease outbreaks. Outdated and sometimes weak legislative capacity and institutional deficiencies in Asia and Pacific make it almost impossible to monitor cross-border animal movements and to implement border control and other disease management measures at national and regional levels.

Policy interventions put in place by FAO, on animal health and disease transmission integrate animal health programmes, food safety and socio economic impact assessment. Some specific examples are the development of animal health legislation for Lao PDR in support of their membership to WTO (UTF/LAO/018/LAO), the Environmental Animal Health Management Initiative (GCP/RAS/244/ITA), which looks at disease within its environmental context and the animal identification and traceability system in Thailand (TCP/THA/3401).

#### Coordination

Strong regional coordination is required to harmonize policies, strengthen public and private veterinary services, and to develop regional disease control and prevention programmes.

FAO partners with OIE and WHO, the regional groups (ASEAN, SAARC, SPC) and other technical partners as well as countries to synergize and complement animal health management activities and to efficiently use its resources.

To date, FAO is hosting the Regional Support Units of ASEAN and SAARC within the GF-TAD mechanism and has recruited nationals of both sub-regions to work under this set up. It is hoped, that by recruiting nationals as staff technical capacity within the region will be further strengthened.

#### **Capacity Building**

Significant investments in locally available human skills and institutions, and the implementation of much more rigorous and organized programmes that use multiple disciplines (such as epidemiology, economics, etc.) to assist in decision-making have been made and are continuously being made.

FAO-RAP has designed and is implementing programmes to strengthen:

- national capacities to understand patterns of disease occurrence within its environmental context through the environmental animal health management initiative (EAHMI),
- Field and laboratory surveillance through the Field Epidemiology Training Programme (FETPV),
- cross-border emergency preparedness and response through market chain studies,
- diagnostic capacity for priority diseases such as FMD, CSF, PRRS, rabies, brucellosis through a skills, biosafety and biosecurity programme and quality assurance programmes (e.g. through FAO-APHCA/OIE's joint laboratory quality assurance and proficiency testing programme for brucellosis).

#### **Information Generation and Knowledge Sharing**

Networks have been formed to facilitate the exchange of information amongst partners and stakeholders. Amongst these networks are the FAO-OIE Network of Expertise on Animal Influenza (OFFLU), the Epidemiology Consortium which promotes disease information sharing, the 4-Way Linking of Human and Animal Influenza Information and the Laboratory Network.

A number of studies, such as for example market chain studies, have been commissioned to better understand the dynamics and context of the occurrence of livestock diseases (for details see 'commissioned studies').

#### **Support to Field Programme Implementation**

FAO-RAP designs and implements field projects, both disease-specific as well as cross-cutting throughout the region. About 20+ animal health related projects are currently operational in the region (see activity report section). These projects may be national or regional in scope, but are designed to strengthen capacities of countries on disease control and prevention.

A vital lesson from the animal health interventions is that tailored disease risk mitigation approaches throughout the food chain should incorporate a multidisciplinary dimension of disease control that would foster improved animal health management practices, enhance food safety/quality along the food chain, and support the development of safe animal trade. Ensuring healthy animals and animal products and by-products along the food chain ultimately lowers public health risks and lowers disease costs to society.

### AMU and AMR in the Asia-Pacific Region

At the 36<sup>th</sup> APHCA Session delegates from 15 countries in the Asia-Pacific region presented and reviewed the extent of antimicrobial use (AMU) in livestock production and antimicrobial resistance (AMR) in micro-organisms isolated from livestock and livestock products. Although only limited data is available on the use of antimicrobials in farm animals in Asia-Pacific indirect evidence of widespread (mis-)use of antimicrobials in livestock production in the region is provided by the high prevalence of AMR to selected compounds found in enteric microorganisms isolated from food-producing animals and retail meat across Asian countries (see below table for AMR in Salmonella isolates).

AMR in non-typhoidal *S. enterica* isolates from livestock and livestock products in Southeast Asia

Country	No of	Source	Percentage of resistant isolates			ates
	isolates	•	TET	AMP	SUL	MDR
Cambodia	152	Poultry	21	17	13	ND
Malaysia	33	Various Istk	64	24	48	49
Malaysia	55	Poultry	85	29	ND	75
Thailand	211	Poultry & pigs	59	49	68	66
Thailand	131	Raw pork	67	35	55	44
Vietnam	89	Pigs	92	41	57	56
Vietnam	91	Meat & shellfish	41	22	17	21
Vietnam	241	Cattle, pigs & poultry	49	26	30	40

TET = Tetracyclines, AMP = Ampicillin, SUL = Sulfonamides, MDR = Multidrug resistance (resistance to at least three different classes

Source: Van et al., 2012

Against this background, APHCA delegates recognized that action in each member country was needed to underpin regional and global AMR risk reduction measures.

Delegates however also noted that AMR can only be tackled through a collective effort requiring a degree of harmonization and standardization of approach.

To foster a process of harmonization and standardization for the management of AMR, APHCA convened an Expert Workshop held in Bangkok on 14 and 15 May, bringing together national and international experts with the specific objectives to:

- Exchange information about various protocols for AMU and AMR monitoring / surveillance used in countries of the Asia Pacific region
- Review approaches for monitoring of AMU in livestock that allows identification (and quantification) of risk factors for the development and occurrence of AMR
- Review approaches to antimicrobial susceptibility testing (antimicrobial agents, test ranges, interpretive criteria, etc)
- Based on the OIE guidelines for AMR surveillance develop proposal for standardized AMR monitoring protocols
- Familiarize participants with methods for AMR risk assessment and risk management, and
- Identify country-specific support requirements to implement / move towards implementation of the above proposed protocols (Working groups)

One the outcomes of the Expert Workshop was the unanimous decision to form an *Expert Working Group on Veterinary Antimicrobial Resistance Risk Management*. The objective of the working group would be to advocate for increased national and regional policy development and action in APHCA member countries and the region as a whole on the issue of AMR in bacteria of food animal origin (including pathogens of food animals, zoonotic bacteria and commensals).

A core group of invited experts will assist selected APHCA country experts to fulfill the following Terms of Reference.

- Develop educational and information materials on AMR and risk management approaches to facilitate discussions on policy and funding
  - o Identify key decision-makers in each country
  - Identify key stakeholders in each country
  - Prepare communication / outreach plan to engage in dialogue
- Develop context-specific guidelines for the responsible and prudent use of antimicrobials in food animal production tailored to the situation prevailing in APHCA member countries
- Propose harmonized science-based guidelines for AMR monitoring programme development:
  - Appropriate collection methodology of samples for the isolation of farm animal-related bacteria to be assessed for AMR
  - Standardized laboratory methods for the assessment of AMR
  - Collation, analysis and reporting of AMR laboratory results on a regular basis

- Propose science-based guidelines for AM sales/use data programme development
  - Harmonized reporting among countries as much as possible, depending on data sources, availability, etc.
- Develop national or regional regulatory agency AMR risk assessment for antimicrobial products that guide risk management decisions
  - To take into consideration the AMR monitoring and AM sales/use data
- Establish an information / data base on alternatives to antimicrobial use in food animal production
  - Disease prevention practices; biosecurity, consumer hygiene practices, etc.
  - Alternative, locally available disease control interventions
- Share the results of the work conducted via symposia, web-posting or other means
- Seek financial support to enhance national AMR management capabilities and capacities

So far, Bhutan, the Philippines and Thailand have nominated national expert members for the working group while international experts have been identified for the following specific subject areas: (i) international standards on AMR risk management and prudent use of antimicrobials, (ii) surveillance & epidemiology, (iii) microbiology & AMR surveillance, (iv) regulatory affairs, and (v) evolutionary biology of AMR.

Although a proposal for funding of working group activities has not been successful, Malaysia and the Philippines have already taken steps to improve their AMR monitoring programmes drawing on the expertise of the international working group members.

#### **National Feed Assessments**

Increases in population and disposable income in Asian countries are driving an unprecedented rise in demand for food of animal origin, i.e. meat, milk and eggs (see table overleaf). This rapidly growing demand will severely stretch the capacity of existing food production and distribution systems with major implications for natural resource use and consequential environmental, health – both animal and human – and socio-economic impacts.

Feed is the foundation of the livestock production, with feed costs generally accounting for up to 70% of the cost of production. Feed prices have been increasingly volatile due to negative impacts of climate change and natural disasters, as well as from increasing competition in the use of grains between feed and bio-fuel. Animal feeding systems impact on animal reproduction, health and welfare, and the safety and quality of animal products. Ensuring access to feed in sufficient quantity and quality is therefore among key strategic priorities for livestock sector development. For the region as a whole, net imports of feed and fodder have grown from \$2.8 billion in 2000 to \$8.0 billion in 2010 (with South Asia and Australia / New Zealand being net exporters) while the balance of

payments for soybean imports, a large share of which is used as animal feed, has deteriorated from net imports worth \$4.8 billion to net imports of \$27.6 billion over the same period.

Absolute and relative growth in total and *per capita* consumption of animal source food in Asia-Pacific 2000 to 2010

		National cor	National consumption		nsumption
Sub-region	Lstk pro- duct	Absolute growth (1000 tons)	Relative growth (%)	Absolute growth (kg/yr)	Relative growth (%)
South Asia	Meat	3,264	39.5	1.3	22.1
	Milk	33,532	35.6	11.9	18.2
	Eggs	1,406	53.3	0.7	36.4
East Asia	Meat	17,566	24.8	9	19.1
	Milk	27,113	110.6	16.6	101.2
	Eggs	5,147	22.2	2.5	16.4
SE Asia	Meat	6,002	64.2	8.4	46.7
	Milk	1,686	23.3	1.4	10.1
	Eggs	1,005	48.5	1.3	32.5
Australia & NZ	Meat	429	17.3	3.2	3.0
	Milk	308	6.6	-13.1	-6.4
	Eggs	20	13.2	0	0.0
SWP	Meat	15	15.5	-0.2	-0.3
	Milk	10	10.6	-1.4	-3.5
	Eggs	2	21.0	0	-1.3

Source: FAOSTAT

Absolute and relative change in Asia-Pacific feed and soybean trade balances 2000 to 2010 (million \$)

Sub-region	Item	1999-2001	2009-2011	% Change
South Asia	Feed / fodder	245.2	740.1	201.8
	Soybeans <sup>1</sup>	-132.2	-472.8	257.5
East Asia	Feed / fodder	-2,447.0	-4,478.5	83.0
	Soybeans	-3,976.6	-25,217.4	534.1
Southeast Asia	Feed / fodder	-971.1	-4,523.9	365.9
	Soybeans	-738.5	-1,862.0	152.1
Australia & NZ	Feed / fodder	362.7	324.7	-10.5
	Soybeans	0.3	0.8	203.2
SWP	Feed / fodder	-17.6	-49.4	180.2
	Soybeans	0.0	-0.1	497.9
TOTAL	Feed / fodder	-2,827.8	-7,987.0	182.4
	Soybeans	-4,847.0	-27,551.5	468.4

<sup>&</sup>lt;sup>1</sup> Various proportions used in animal feed

The prospect of dramatically increasing demand for animal source food and consequential growth in demand for animal feed raises the question as to how these feed requirements can be met, particularly in land-constrained countries and regions, and in the face of the growing food – feed – fuel competition.

In order to better monitor and guide national and regional livestock sector development strategies, it is essential to develop systematic approaches to accurately assess livestock feed supplies and to obtain better insight into how these feed resources are being utilized, and how the prices are changing.

Accurate estimation of feed resource availability and use would improve assessments of the environmental impacts of livestock, both through land use change and through greenhouse gas emissions associated with livestock production. Accurate information on the proportions of cereals being diverted to animal feed is a critical element for assessing national and regional food security situations. Furthermore, feed assessments, including the price developments, are essential pre-requisites for developing optimal feeding strategies at various levels and thus environmental sustainability and food security.

Unfortunately, despite their strategic role in livestock sector development planning, feed balances are not usually available and where available, they tend to be rather inaccurate. Sub-optimal input data for country-level food/feed input-output analyses and the inability to accurately assess environmental impacts of livestock are challenges that all initiatives and stakeholders involved in sustainable livestock development are confronted with.

Against this background, FAO and APHCA organized a regional workshop entitled *Animal Feed Resources and their Management in the Asia-Pacific Region* with the following envisaged outcomes:

- An agreed and systematic approach for:
  - a) conducting feed assessments,
  - b) characterizing feeding systems,
  - c) generating quantitative information on compound feed and concentrate mixes and their utilization, and,
  - d) systems for regularly updating the above information

and

• The foundations for a regional initiative towards better use of feed in livestock production in Asia.

Guidelines for conducting *national feed assessments* (NFAS) based on lessons learned across a wide range of feed situations, from spatially extensive rangeland and grasslands to highly intensive crop-livestock systems produced by AGA, FAO in 2012 were taken as the basis for generating the national feed inventories and feed balances. In May, a uniform format for data compilation was sent to all potential participants by the APHCA secretariat. This format covered feed assessment, herd structure (required for

calculation of feed balance), characterization of feeding systems and estimation of the amounts of cereals used for animal feed production. The senior feed expert from FAO HQ provided regular mentoring and guidance to the participants.

The workshop was attended by (i) national delegates involved in animal production with particular expertise in the field of animal feeding, (ii) directors of animal production in ministries of Livestock or Agriculture, (iii) experts in livestock development, animal nutrition, feed technology, and (iv) private processors and feed producers.

Delegates representing 13 countries presented their national feed assessments. The focus of these presentations was on the approaches used in their countries for generating the information. Group discussions were held on: i) identification of approaches for national feed assessments and establishing and updating of national feed assessments, and ii) approaches for characterization of feeding systems and how countries should characterize feeding systems. Also facilitated discussions were conducted on: i) knowledge gaps in feed assessments and characterization of feeding systems, and ii) establishment of a network / platform / mechanism to institutionalize feed use / availability data collection and sharing system. The conclusions and recommendations from the workshop are being finalized and will be integrated into the updated and agreed guidelines document. These guidelines will be followed by all participants to generate additional data and to improve the country report, a final version of which shall be submitted by November 2013.

Addressing the second envisaged outcome, it was suggested to form an 'Asia-Pacific Animal Feed (APAF) Network' under the auspices of FAO-RAP / APHCA. A broad outline of the network being considered is presented below.

#### Outline of an Asia-Pacific Animal Feed Network

#### Outputs

- Feed (resource) inventory with regular updates
- Feeding systems characterization and mapping
- Assessment and forecast of feed demand and supply (feed balances)
- Price monitor for feed and feed ingredients
- Trade figures for feed and feed ingredients
- Guidelines on feed resource management

#### Clients / users

- National public sector agencies / departments responsible for polices in areas affecting and affected by livestock sector development (i.e. beyond Ag ministries, e.g. natural resources / environment, trade, etc)
- Bi- and multilateral development agencies, NGOs, CSOs
- Academia
- Feed industry and producer associations
- Farmers

#### Information sources / suppliers

- National public sector agencies / departments
- Academia
- Feed industry and producer associations

#### **Functional set-up**

- National 'lead group' / champion
- National task force
- Recognized role model(s) (example(s) from which national can 'learn')
- Network catalyst (FAO / APHCA)
- Network coordinator (based in Bangkok)

#### Resource requirements (year 1) (USD)

Meeting(s)
 Professional network coordinator<sup>1</sup>
 Miscellaneous
 10 to 20k

Participants urged FAO and APHCA to build on the momentum generated by the workshop and to initiate formation of the network by establishing and funding the position of network coordinator. Additionally, FAO and APHCA were asked to develop a strategy to ensure longer-term funding to support network activities, while potential national champions / focal points were identified for India, Indonesia, Malaysia and Thailand.

# Support to the Agenda of Action for Sustainable Livestock Sector Development

The Agenda of Action is a global initiative involving a multi-stakeholder process with participation of governments, private sector actors, academia and concerned civil society representatives to formulate an agreed response to the urgent question as to how the global livestock sector can play a sustainable role in food security and equitable economic development in an increasingly resource-constrained, urbanizing and more affluent world.

Natural resource use efficiency and the consideration of positive and negative externalities have been identified as the common ground. Three focus areas have been agreed and developed: (i) *Closing the Efficiency Gap*, (ii) *Restoring Value to Grasslands* and (iii) *Waste to Worth*.

As a fundamental component of the Agenda's consultation processes, three Multi-Stakeholder Platform (MSP) meetings have thus far been organized: The first in Brasilia, Brazil (May 2011), the second in Phuket, Thailand (December 2011), and the third in

<sup>&</sup>lt;sup>1</sup> Qualifications: Basic degree in Animal Nutrition, good knowledge in economics, statistical analysis and modelling; excellent skills in data and database management, experience of managing networks; good English writing skills

Nairobi, Kenya (January 2013). In addition, workshops were organized in Rome, Italy (April 2012), Seoul, Republic of Korea (April 2012); Brasilia, Brazil (May 2012), Braunschweig, Germany (April 2013), Rome, Italy (June 2013) and Bangkok, Thailand (August 2013). Outcomes of these meetings and further updates on the progress of the *Agenda* are available from <a href="https://www.livestockdialogue.org">www.livestockdialogue.org</a>.

FAO-RAP has been actively engaged in the initiative since its inception in Brasilia in May 2011 and the RAP Livestock Policy Officer has been assigned as the regional focal point for agenda activities. FAO and APHCA representatives have participated and made presentations in all MSP meetings (FAO-RAP officer in Brasilia and respective APHCA Chairpersons in Phuket and Nairobi) and selected focus area meetings (Seoul in April 2012). FAORAP, APHCA and Royal Thai Government also co-hosted the second MSP meeting in Phuket and the *Waste to Worth Focus Area* meeting in August 2013 in Bangkok.

Agenda activities remain highly relevant to livestock sector developments in the region and it would be worthwhile exploring mechanisms and activities to (i) further deepen the regional engagement with the *Global Agenda*, and (ii) promote a regional platform to inform and support national and regional policy making in pursuit of broader goal of sustainable livestock sector development.

#### **APHCA Information Unit**

In line with the Vision of APHCA to establish itself as a prime source of information, knowledge, expertise and experience on all aspects of livestock sector development in the Asia-Pacific region formulated at the APHCA Strategy Workshop, the Information Unit has devoted considerable time maintenance and improvement of the APHCA website. The current 'content' and 'activity' of the APHCA website is summarized in the table below.

Content of APHCA website, visits and downloads – 30.09.12 and 31.08.2013

Item	30.09.12	31.08.13	Diff.
News items posted	87	482	395
Links to videos	0	82	82
Links to institutional web-sites	142	158	16
Uploaded documents	146	194	48
Unique visitors	na	4,588	Na
Visits	39,222	319,026	279,804
Downloads	28,714	112,645	83,931

Over the 11-month period from 30 September 2012 to 31 August 2013, the site was visited 279,804 times by 4,588 unique visitors, of which 2,143 (47%) reside in APHCA member countries. The site is currently ranked among the top 15% of more than 30 million sites monitored by www.webstats.com.

Around 84,000 document downloads were recorded over the 11-month period. The three most frequently downloaded documents by document category are presented in the table below.

Most frequently downloaded documents by category

Document type	Title	Year of Publication	Downloads 2012/13
Book	Meat Processing Technology	2007	1,473
	The Yak Second Edition	2003	1,175
	Economics of Livestock Sector Development	2012	611
Guide /	A Basic Laboratory Manual	2002	1,324
Manual	Designing and Implementing Livestock Value Chain	2012	1,067
	Studies		
	Semi-Intensive Growing Pig Management	2006	1,050
Proceedings	1 <sup>st</sup> Asia Dairy Goat Conference	2012	2,035
	Goats – Undervalued Assets in Asia	2006	1,388
	APHCA Strategy Workshop	2012	1,062
Working	Qualitative Risk Assessment of the Risk of		1,580
Paper /	Introduction and Transmission of H5N1 HPAI Virus		
Study	Study Non-Conventional Feed Resources in Asia and the Pacific		1,279
	Livestock Production Systems in South Asia and the Greater Mekong Sub-Region	2010	1,005
Research Brief	Promoting Rural Livelihoods and Public Health through Poultry Microfinance: Lao PDR	2012	688
	Pro-Poor Disease Risk Reduction for Smallholder Poultry Supply Chains in Cambodia	2012	534
	Promoting Rural Livelihoods and Public Health through Poultry Contracting: Thailand	2012	492

Hardcopies and CD-ROMS of FAO and APHCA publications have been distributed upon request and in conjunction with workshops and meetings.

Requests for information by media were received on the following issues:

- Food safety issues in China (Finish Newspaper, Beijing office)
- Animal-human relationships: synergies, competition and risks (IRIN)
- Indian beef industry and exports (Financial Times, India office)
- Illegal dog trade and dog meat industry in Southeast Asia (Deutsche Welle)

Submission of studies and other documents by member countries and establishment of links from their institutional websites is solicited

## **Livestock Sector Policy Capacity**

As mentioned earlier, increases in human population and disposable income in the Asia-Pacific region are driving an unprecedented rise in demand for meat, milk and eggs, a

rise which is expected to continue over the next decades. (See below projections for various types of meat in India and China to 2021.)

Consumption of meat in India and China, 2009-2011 and 2021 (1 000 tons)

Country	Product	2009-2011	2021	Diff.	% Change
India	Beef	1,859	2,498	639	34.4
	Mutton	650	887	237	36.5
	Pig	486	578	92	18.9
	Poultry	2,657	4,401	1,744	65.6
	Total	5,652	8,364	2,712	48.0
China	Beef	5,588	6,472	884	15.8
	Mutton	4,026	4,341	315	7.8
	Pig	50,428	60,140	9,712	19.3
	Poultry	16,971	24,228	7,257	42.8
	Total	77,013	95,181	18,168	23.6

Source: OECD-FAO Outlook 2012

Asian animal agriculture is adapting to this tremendous increase in demand by increasing livestock numbers, a shift towards short-cycle species (particularly chicken), acceleration of production cycles (to a large extent due to increased use of concentrate feeds), larger farming units characterized by high-throughput and their spatial concentration (close to feed sources and / or markets), stratification and vertical integration of production and regionalization of supply chains.

The rapid expansion of and structural changes in Asia's livestock sectors have ensured increased supplies of ASF for Asia's growing and more affluent populations. However, these truly remarkable developments of the livestock sector have come at the expense of:

- (i) increased risks to human and animal health from pathogens harboured by animals, either wildlife or livestock themselves;
- (ii) environmental degradation, pollution and acceleration of climate change through livestock associated emission of green house gasses, and
- (iii) marginalization of smallholder livestock keepers and exploitation of agricultural labourers.

Health: The intensification of agriculture and livestock production is not always a human health risk amplifier and a number of zoonotic diseases decrease as livestock systems intensify and animals are moved into highly regulated environments. However, the rapid growth and intensification of livestock production within a poorly regulated environment and without the concomitant strengthening of animal and veterinary public health systems generates major health risks for livestock (e.g. hp-PRRS, HPAI, FMD, etc) through increased movement of animals, animal products and inputs to livestock production and for humans through emerging infectious diseases (e.g. SARS, Nipah, H7N9, etc) and proliferation of antimicrobial resistance linked to excessive antimicrobial use in animal production. These health risks are not confined to local

populations but, in view of expanding trade and increased mobility, affect health security on a regional and in some cases global scale.

Environment: Large proportions of the vast rangelands (app 1 billion ha, two thirds of the regions agricultural land) of the Asia-Pacific region are considered degraded due to overgrazing. In addition, in many areas animal wastes originating from intensive livestock systems have become a liability rather than a valued input for soil improvement, as is the case in traditional mixed livestock-cropping systems – solely the pig population of China is generating around 250 000 tons of solid waste per day, disposal of which has become a significant problem. Globally, animal agriculture is responsible for nearly half of the total non-CO<sub>2</sub> GHG emissions (methane and nitrous oxide) directly attributable to agriculture and thereby significantly contributes to climate change. In addition to the direct GHG emissions from livestock, land use changes for feed production and associated reduction in CO<sub>2</sub> absorption capacity of vast tracts of land further contribute to climate change.

**Social:** In the Asia-Pacific region, smallholders still constitute the vast majority of households engaged in food animal production and processing and the region is home to nearly 500 million poor (<2\$/day) livestock keepers (close to 70% of the global total). Rapid expansion of corporate industrial food animal production and marketing systems carries the risk of excluding many small-scale livestock producers and processors from the high-value food markets due to their generally limited access to inputs, services and knowledge of smallholders as well as due to non-level playing fields. Excluding smallholders from these expanding and lucrative markets blocks one of the main pathways for rural poverty reduction and thereby perpetuates rural poverty and enhances urban – rural disparities. The experience with contract farming in the region is mixed with legal arrangements between large-scale corporate enterprises and private contract farmers tending to be tilted in favour of the former while hired farm labour is often subjected to exploitative employment conditions with little if any legal recourse.

The difficulties faced by public agencies in guiding livestock sector development to take a path that maximizes social benefits while keeping risks at acceptable levels cannot be overstated. Unfortunately systems to capture detailed, up-to-date and comprehensive information to support the policy making process are rare and capacity for livestock policy analysis is usually rather undeveloped. As a consequence, livestock sector policies and programmes often depend on anecdotal evidence and decisions are taken without informed assessment of the larger economic, social and environmental implications.

To address the above shortcoming, the formulation of a project proposal for the formation of a Livestock Policy Network was agreed at the 36<sup>th</sup> APHCA Session. An advanced draft of the project proposal has been elaborated and shared with a number of donors (BMGF, IFAD, FAO-TC), however with disappointing results. Notwithstanding the reluctance of donors to support the formation of a livestock Policy Network, it should be in the interest of APHCA members to strengthen national capacity of livestock sector policy formulation. It is therefore suggested that APHCA considers developing a programme for national livestock policy capacity building drawing on the trust fund.

## Work Planned up to End 2013

- ➤ 25-26 September 2013; World School Milk Day Celebrations and TCP closing workshop in Myanmar [VA]
- ➤ 8-9 October 2013, Inception workshop for TCP/MDV/3402 Support for the development of a domestic egg industry in the Maldives [VA]
- > 28-30 October 2013, Fiji, Nadi, One Health for SPC [CB, JO]
- ➤ 23-24 October 2013, Stakeholder workshop for poultry policy formulation in Afghanistan [VA]
- ➤ 11-14 December 2013, Thailand, Ayutthaya, 4<sup>th</sup> FAO-APHCA/OIE Regional Workshop on Brucellosis Diagnosis and Control in the Asia-Pacific Region (Proficiency Test and Ways Forward) [VS]

# Decision Items and Proposed Budget for 2014 (APHCA 2012/06)

#### Scale of Contributions

The current scale of contributions has remained unchanged since 2003 and at the 36<sup>th</sup> Session APHCA Members requested the Secretariat to develop a proposal for a revised scale of contributions that offsets the real term decline.

The Secretariat could not find any record of the criteria used to originally establish the three levels of contributions, which are laid out in the APHCA agreement along with the countries falling in each, irrespective of APHCA membership at the time. The first APHCA Session reports (late 1970s) indicate that the original contributions were set as US\$5 000; US\$3 000; and US\$1 000 for Group A, B, and C countries respectively. Corresponding 2012 US\$ amounts would be US\$17 750; US\$10 650; and US\$3 550; some 66% above the current scale of contributions.

Taking the 1999 scale of contributions as reference point (US\$9 330; 6 020 and 1 970) and adjusting these to 2012 prices would yield a scale of contributions of US\$12 969, 8 368 and 2 738 for group A, B and C countries. This scale would appear 'realistic and acceptable' (similar values would be obtained taking the 2003 scale of contributions as reference). Following India's advice to incrementally raise contributions, the Secretariat is putting forward for consideration the following:

- for 2014 the scale of contributions shall be US\$12,000, 7,500 and 2,400,
- for 2015 the scale of contributions shall be US\$14 000, 8 400 and 2 750,
- for subsequent years the scale of contributions shall be decided at the 2015 Session.

#### Historical and proposed scale of contributions

	Countries	Scale of Contributions			Proposed	
Group		1970s	1999	2003 to 2013	2014	2015
Α	Australia, China, India, Japan, New Zealand	5 000	9 330	10 724	12 000	14 000
В	Afghanistan, Bangladesh, Indonesia, Iran, Rep. Korea, Malaysia, Myanmar, Pakistan, Philippines, Sri Lanka, Thailand, Vietnam	3 000	6 020	6 502	7 500	8 400
С	[Bhutan],Cambodia, Fiji, Lao, Maldives, Mauritius, Nepal, PNG, Singapore, [DPRK], [Samoa]	1 000	1 970	2 128	2 400	2 750

### Membership of Secretariat of Pacific Countries (SPC)

The below letter dated 21 June 2013 was received from the Secretariat of Pacific Countries requesting to become member of APHCA.



## **Proposed APHCA Trust Fund Budget for 2014**

## Operational Budget, APHCA TF and Estimated Contribution of FAO-RAP

		FAO's Estimated	
Budget line	APHCA TF	Contributions	Total
5011 Salaries Prof.	0	45,000	45,000
5012 Salaries GS	25,000	25,000	50,000
5013 Consultants	26,000	30,000	56,000
5014 Contracts	30,000	25,000	55,000
5020 Locally Contracted Labour	1,000	0	1,000
5021 Travel	46,000	10,000	56,000
5023 Training	0	0	0
5024 Expendable Procurement	1,000	0	1,000
5025 Non-expendable Procurement	0	0	0
5026 Hospitality	2,000	0	2,000
5028 General Operating Expenses	4,000	0	4,000
Total	135,000	135,000	270,000

## **Functional Budget, APHCA TF**

Activity / Thematic Area		Amount (US\$)
Smallholder Dairy Development		25,000
Feed Resource Management		20,000
Zoonoses and Food Safety		20,000
Antimicrobial Resistance (AMR) Management		20,000
Livestock Policy Capacity Development Plan		20,000
Information Dissemination and APHCA Positioning		30,000
	Total	135,000

## List of Participants (APHCA 2013/07)

#### **DELEGATES**

#### **Australia**

#### Dr P.F. BLACK

A/g Assistant Secretary
Animal Health Policy Branch
Department of Agriculture, Fisheries and
Forestry
GPO Box 858

Canberra ACT 2601

E-mail: Peter.Black@daff.gov.au

#### Bhutan

#### Dr T. DORJI

Director-General a.i.
Department of Livestock
Ministry of Agriculture and Forest
Post Box 252
Thimphu

E-mail: c/o Dr. Naiten Wangchuk:

naitenw@yahoo.com

#### Indonesia

#### Dr I. SUANDY

Quality Control Laboratory for Livestock Products

Directorate of Veterinary Public Health Services

JCI VICCS

Directorate General of Livestock Services

Ministry of Agriculture

E-mail: imron az@yahoo.com

#### Malaysia

#### Dr M. MAT AMIN

Director

Regional Veterinary Laboratory

Bukit Tengah, Penang

E-mail: <a href="maswati@dvs.gov.my">maswat60@hotmail.com</a>

#### **Bangladesh**

#### Dr M. RASHID

Livestock Officer

**Department of Livestock Services** 

Dhaka

E-mail: rashidmdr@yahoo.com

#### India

#### Dr B.N. TRIPATHI

Director

National Institute of Animal Health

(NIAH)

Baghpat-250609, Uttar Pradesh E-mail: bntripathi1@yahoo.co.in

#### Lao PDR

#### Dr S. PHIPHAKKHAVONG

Deputy Director-General

Department of Livestock and Fisheries

P.O. Box 811, Vientiane

Email: sithongp@yahoo.com;

laodlf@gmail.com

#### Myanmar

#### Dr M. MAUNG

Deputy Director (Sagaing Region)
Livestock Breeding and Veterinary
Department

Email: lbvd@mptmail.net.mm;

ytwvet84@gmail.com

#### **Pakistan**

#### Dr R.H. USMANI

Animal Husbandry Commissioner Ministry of National Food Security and

Research

Room No. 813, Shaheed e Millat

Secretariat

Blue Area, Islamabad

E-mail: usmanirh@gmail.com

#### **Philippines**

#### Dr R. CRESENCIO

Director

Bureau of Animal Industry Visayas Avenue, Diliman

Quezon City 1100

E-mail:

<u>rubina.cresencio@gmail.comrubicres@m</u> ozcom.com

#### Sri Lanka

#### Dr W.K. de SILVA

Director-General

Department of Animal Production and

Health

P.O. Box 13, Peradeniya E-mail: <a href="mailto:dgdaph@sltnet.lk">dgdaph@sltnet.lk</a>

OBSERVERS

#### **OIE Regional Rep. Asia-Pacific**

#### Dr H. KUGITA

Regional Representative

OIE Regional Representation for Asia

and the Pacific

Food Science Building 5F The University of Tokyo 1-1-1 Yayoi, Bunkyo-ku

Tokyo, 113-8657

Japan

E-mail: rr.asiapacific@oie.int,

#### **Papua New Guinea**

#### Dr N.K. KAPO

Chief Veterinary Officer and Chief Quarantine Officer (Animals) National Agriculture Quarantine and Inspection Authority Veterinary Services P.O. Box 741 Port Moresby, National Capital District

E-mail: nkapo@naqia.gov.pg

#### Samoa

#### Dr A. MEREDITH

Principal Animal Health Officer Animal Production and Health Division Ministry of Agriculture and Fisheries P.O. Box 1874

Apia

E-mail: agnes.meredith@maf.gov.ws

#### **Thailand**

#### Dr P. MATAYOMPONG

Veterinarian (Expert Level)
Bureau of Livestock Standards and
Certification

Department of Livestock Development

Phya Thai Road Bangkok 10400

E-mail: pennapam@dld.go.th

#### **OIE Regional Rep. Asia-Pacific**

#### Dr T. ISHIBASHI

Deputy Regional Representative OIE Regional Representation for Asia and the Pacific Food Science Building 5F

The University of Tokyo 1-1-1 Yayoi, Bunkyo-ku Tokyo, 113-8657

Japan

E-mail: t.ishibashi@oie.int

#### oietokyo@tky.3web.ne.jp

## Secretariat of the Pacific Community (SPC)

#### Dr K. COKANASIGA

Adviser

Animal Health and Production Land Resources Division Secretariat of the Pacific Community Private Mail Bag Suva Fiii

E-mail: kenc@spc.int

#### Bhutan

#### Dr N. DAHAL

Principal Veterinary Officer E-mail: <u>Dahalnp07@yahoo.com</u>

#### **SECRETARIAT**

#### FAO-RAP / APHCA

#### Dr J. OTTE

Senior Animal Health and Production Officer/Secretary of APHCA E-mail: joachim.otte@fao.org

#### Dr V. AHUJA

Livestock Policy Officer E-mail: <a href="mailto:vinod.ahuja@fao.org">vinod.ahuja@fao.org</a>

#### Ms Y. SIMUANGNGAM

APHCA IT-Clerk

E-mail: yupaporn.simuangngnam@fao.org

#### **Thailand**

#### Dr S. KITTIJARUWATTANA

Veterinarian (Senior Professional Level) Bureau of Quality Control of Livestock Products Department of Livestock Development Phya Thai Road Bangkok 10400

E-mail: sunank@dld.go.th

#### Bhutan

#### Dr N. Wangchuk

Chief Livestock Officer

E-mail: Naitenw@yahoo.com

#### Dr C. BENIGNO

Animal Health Officer

E-mail: carolyn.benigno@fao.org

#### Dr V. SONGKITTI

Liaison Officer for APHCA

E-mail: vishnu.songkitti@fao.org