

JOURNAL OF COMMONWEALTH VETERINARY ASSOCIATION

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To Be Nominated **MEDITERRANEAN**

President's Column



The Commonwealth Veterinary Association (CVA) is one of the several professional organisations within the Commonwealth, which among others seek to promote the welfare of their membership and strive to enhance the contribution of the profession to national development for the people of the Commonwealth.

Veterinary health delivery and animal welfare remain a mirage in most developing countries. Privatisation has pushed the cost even beyond the farmer.

To many people a sick animal is better dead than alive especially when many find it difficult to obtain needed medical attention because they cannot afford to pay for it. It is such areas that CVA faces real challenges.

I feel it a very special privilege to lead a lean veterinary organisation as CVA devoted to helping its member associations to deliver affordable veterinary services to all parts of the Commonwealth.

The CVA New Executive is very aware of the numerous challenges facing the association and the veterinary profession in this 21st century. The historic PCVC4 held in St. Michael in Barbados in the Caribbean in November of 2007 gave an overview of the 40 years of existence of CVA. Many of these challenges and the way forward was the focus of delegates from the over 50 member associations.

I take this opportunity to thank all CVA Officers, both outgoing and incoming. For the outgoing may we agree that this is the time your immense experience is most needed and hope you will continue to provide your valuable service to CVA. Thank you.

On behalf of the new executive committee of the CVA, I want to thank the CVA for voting us into office.

May God Bless you and your families this festive season. Merry Christmas and a Happy New Year.

January 2008

Richard Suu-Ire President

Wish you A Happy and Prosperous New Year 2008

4th Pan Commonwealth Veterinary Conference 4-8 November 2007, Barbados, West Indies ~ Dr. Robin Yarrow, Past President CVA



The first Pan Commonwealth Veterinary Conference [PCVC] to be held in a developing island state was attended by over 300 participants from more than 40 countries and was a considered by all a great success.

The PCVC4 theme of 'Animal Health and Welfare: Constant Challenges for Veterinarians' was a relevant one and the strong connections between animal and human health and general welfare were very succinctly and aptly expressed in the 4 words which the Organising Committee of the Barbados Veterinary Association [BVA] coined for the Conference logo, namely 'COMMON HEALTH...COMMON WEALTH.'

PCVC4 was staged with 5 concurrent sessions and covered a remarkable field of subjects, from traditional companion animal medicine through international public health and animal welfare to exciting but often less-featured subjects, such as aquatic animal medicine and marine mammals. Emerging diseases and stem cell technology were also featured as was the impacts of climate change for the profession. The fact that PCVC4 was held in a small island state was particularly timely and relevant for the many representatives of island countries attending, including the large contingent from

the Pacific. The pre-Conference claim by the Barbados hosts that 'if it affects animals, PCVC4 has it' proved to be very well justified.

The Conference was inaugurated by the Barbados Minister of Agriculture and Rural Development, the Hon. Erskine Griffith, who extended a very warm welcome to the participants from across the globe. The Minister stressed the special challenges which small island states face and touched on priority issues as well as on the work of the CVA. The Keynote Address was provided by Dr Mark Collins, Director of the Commonwealth Foundation, a key partner, with which the CVA has had a close association since its establishment. Dr Collins's address was titled 'The Millennium Development Goals at Half Time: Challenges for the CVA' and provided an informed review of the achievements against the 8 global goals and the 2015 target year. He reaffirmed the robustness and relevance of the MDGs and stressed the imperative of ensuring alignment of national strategies and budgets with the goals as well as the importance of sufficient resources being made available. The overriding need for development to be undertaken within a framework of good governance and democracy was also strongly emphasised. Dr Collins considered that 4 of the 8 MDGs have high relevance for the veterinary profession and a fifth, that pertaining to a 'global partnership for development' was also most significant. In this regard he underlined the key role which civil society must play and the professional organisation network of the Commonwealth Foundation provided good opportunity for this 'cross linkage' to be enhanced. He noted that the CVA is itself a partnership which should be strengthened and he considered that every national veterinary association should feel that it has something to contribute to the wider good, with the benefits of membership far outweighing the costs. In concluding, Dr Collins stressed that livestock are a major asset for the poor and veterinarians, through their national associations and the CVA, can advocate for increasing and improved veterinary support, demonstrate technologies and encourage appropriate research and development, with this target group especially in mind. The featured speaker at the Opening Ceremony was legendary Barbadian cricketer, Reverend Dr Wes Hall. The Reverend provided a fascinating and often amusing overview of his varied and interesting career and impressed all greatly with his style, anecdotes and his strong commitment to his country.

The Scientific program was of extremely high quality. This was a reflection of the very good 'connections' and the hard work of the Organising Committee and their collaborators. While there were a number of sessions which stood out, the two-day Animal Welfare program was considered an outstanding one. A range of respected and highly-qualified speakers were complemented by excellent subsequent discussions, which included a panel and working groups at CVA regional level. The resolutions from the groups, as endorsed by the session plenary, will form the basis of an action plan for the future. It was clear that animal welfare groups alone can not advance this important sector to the extent needed and it is vital that Governments now include provisions in national laws, in line with world-wide trends. In addition, the overriding importance of education was recognised and the practical teaching concepts developed by a CVA partner organisation, the World Society for the Protection of Animals [WSPA], were strongly commended. The convener of the animal welfare session, Dr Peter Thornber of Australia, received well-earned praise for his lead role and organising input.

The fact that veterinarians must pay increasingly attention to the marine sector was well catered for during PCVC4, with a series of excellent presentations on marine mammals and also on aquaculture. The various papers created much interest and the sessions were very well attended. In the process, the important role that veterinarians can play in conserving marine biodiversity

and also in helping to meet the growing demand for seafood, most of which can no longer be met from capture/harvest fisheries, was well underlined. The contribution this involvement can make toward the protection and enhanced sustainability of the planet's ecosystems is therefore significant.

With the MDGs in focus, a number of presentations covered key subjects, including the critical but largely unrecognized and poorly-rewarded role of women in livestock production, particularly in Africa and Asia. The place for strategic projects, such as a number of those initiated and supported by the CVA in both regions, through which this role and the importance of greater empowerment are actively promoted, was recognised.

Good sharing between regions of approaches to some of the pressing issues of our time also took place, for example in the field of Emerging and Transboundary Diseases and in Food Security. The regional approach of the Secretariat of the Pacific Community [SPC] to Avian Influenza for example, was outlined, demonstrating how the medical and veterinary professions are working closely together, in collaboration with national governments, WHO and OIE across a vast ocean area comprising mainly small island states.

An on-line demonstration also took place of the NZ Veterinary Association's SciQuest program, a high quality continuing professional development initiative. In a very commendable gesture, the NZVA has decided to make this program available to individual CVA veterinarians at no charge.

A well-attended field visit was also made to the Barbados Blackbelly Sheep research and breeding unit at Greenland Research Station of the Ministry of Agriculture and Rural Development. There is significant interest in this tropical meat breed in many small island countries, including in the Pacific where breed development work has already commenced in 3 island states. It is hoped that a cooperation program might be established between Barbados and the Pacific Island region on continuing improvement of this breed in the Pacific, possibly under the auspices of the SPC. This possible inter-regional South-South linkage is an example of a very positive 'connection' that came out of PCVC4. Another follow-up connection could be in the field of veterinary education, between the University of the West Indies Faculty of Veterinary Science and an appropriate institution in the Pacific region. In addition, a number of potential Caribbean speakers were identified for the next Australasia/Oceania Regional Conference to be staged in Samoa in late 2008.

The Executive Committee of the CVA as well as the 6 CVA Regional and the Commonwealth-wide Councils, [comprising individual member-country Councillors or representatives] also met on the margins of PCVC4 and covered important governance and program matters. A key decision was made to establish a CVA Working Group on 'online continuous professional development.' This Group would ascertain how the CVA might engage in this exciting area, using links with SciQuest as well as with other experts in this field, in order to help better meet the needs of scattered and often isolated veterinarians in the developing Commonwealth in particular. The CVA Council also decided to lend its support to the draft Universal Declaration on Animal Welfare which WSPA is promoting, for ultimate submission to the UN. In addition, Dr Richard Suu-Ire of Ghana was also elected President of the CVA from January, 2008 and it was further decided to hold the next Pan Commonwealth Veterinary Conference in Ghana in 2011.

PCVC4 was also attended by the current Presidents of the British Veterinary Association and Canadian Veterinary Medical Association respectively, as well as by the immediate Past President of the Australian Veterinary Association. This high level representation reflected positively on the CVA and was also much appreciated, in view of the potential for the better endowed national veterinary associations to further support the activities of the CVA. Support to enable CVA participants to attend PCVC4 came from a number of quarters. Norbrook Laboratories, the CVA's new principal sponsor provided major financial support, for their first CVA Conference. The SPC generously supported 8 Pacific Islands participants, while AusAID, the Technical Centre for Agriculture of the ACP/EU and the Commonwealth Foundation also supported the travel costs of participants. In addition, the Australian Animal Welfare Strategy of the Department of Agriculture, Fisheries and Forests also made a valuable contribution.

PCVC4 was held at the impressive Barbados Hilton in St Michael, not far from Bridgetown, a location right next to the ocean. A very well supported commercial exhibit which in fact exceeded expectations with 18 exhibitors highlighted the importance of the private sector and greatly complemented the scientific presentations. The venue was an excellent one and the setting and ambience contributed significantly to a wonderful experience, both professionally and in terms of personal networking. The social program added further dimension and overall the event was an outstanding credit to the Organising Team headed by BVA President, Dr Gus Reader. Mounting PCVC4 was a mammoth task and the fact that the BVA has a relatively small number of members, made the result even more commendable. In the process, the BVA have served to 'lift the bar' higher than ever for CVA Conferences. Few if any of the participants would disagree with the relevance of such a Conference, bringing together as it did veterinarians and paravets from across the Commonwealth to share knowledge, approaches and experiences and to network in such a positive atmosphere and setting. The CVA Executive is most grateful to Dr Reader and his able team for delivering such a sterling outcome.

Journal of Commonwealth Veterinary Association

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The JCVA publishes original articles, case reports, short contributions and review articles. Please contact the Editor if you plan to write a review.

Send your manuscripts to:

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Animal Welfare

The handling and use of animals in experiments must conform to the International Code of Practice for the care and use of animals for scientific purposes.

Manuscript

Submit the manuscript in duplicate. Type it on one side of A4 paper, with 10 cpi font, leaving a left-hand margin of 3 cm and numbering every fifth line. Use double spacing throughout, including title page, abstract, text, acknowledgments, references, tables and legends for illustrations. Do not underline anything. Number all pages.

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Layout

Articles should have a structured abstract of no more than 250 words. The subdivision is up to the author, but should encompass the Objective, Design, Procedure, Results and Conclusion. Write subheadings in lower case bold letters, followed by the text on the same line. List nonstandard abbreviations and their explanations after the abstract. Use only the abbreviated form in the text. Avoid use of abbreviations in the abstract. The main headings, following an untitled introduction, are Materials and Methods, Results, Discussion, Acknowledgments and References. The introduction should state the purpose of the study. The contents of Materials and Methods should enable others to reproduce the work. Present the findings in Results concisely and logically. Evaluate and interpret the findings in the Discussion, but do not present new data. If possible, write the main conclusions at the end of the Discussion. Headings may vary from standard if the variation makes the article more informative.

Tables

Type each table double-spaced on a separate page. Number tables in Arabic in the order they are referred to in the text. Each table should have a concise title that describes its content adequately. Information in the table must not be repeated in detail in the text. Do not use vertical lines. Use horizontal lines to separate the table from the title, and footnotes and column headings from data.

Figures

Both black and white and colour photographs are encouraged to a maximum of five only. Figures can be submitted in digital form as separate files. They should be saved as TIFF, JPEG or EPS files with a resolution of 300 dpi. EPS files must be saved with the preview option. Illustrations provided as MS Word files will not be accepted. Write legends for figures and explanations of symbols on a separate page. Legends should contain enough information to make the figure comprehensible without reference to the text.

References

Cite only those publications that are essential for the understanding of the study. Number text references consecutively, in the order in which they are mentioned, by superscript Arabic numerals. Write and number the reference list in the sequence of the references in the text. References to journals, books, conference proceedings, organisational papers, anonymous editorials, foreign language articles and internet web sites, respectively, are written as follows:

- 1. Gibson KT, Hodge H, Whittem T. Inflammatory mediators in equine synovial fluid. Aust $Vet \, J \, 1996; \, 73: \, 148-151.$
- 2. Peterson ME, Randolph JF, Mooney CT. Endocrine diseases. In: Sherding RG, Editor. *The Cat: Diseases and Management.* 2nd edn. Churchill Livingstone, New York, 1994: 1403-1506.
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- 7. Council of Docked Breeds. The case for docking. http://www.cdb.org. 1992. Retrieved 15 October 2001.

List all authors if there are five or fewer. When there are more than five authors, list only the first three and add 'et al'. Write titles of books, journals and other publications in italics. Capitalise only the first letter of the book titles. Do not underline or use bold letters. The abbreviation of journals follows that of Serial sources for the BIOSIS previews database. Cite references to unpublished work only in the text, with a notation of (personal communication) or (unpublished). Please send a copy of any cited work that is included in the reference list as 'in press'. It is the authors' responsibility to check the accuracy of reference citations.

Acknowledgments

Only acknowledge significant intellectual, technical and financial contributions. A short work warrants short acknowledgments.

Articles of General Interest

Articles of general interest, experiences in treating of clinical cases, country reports, success stories in animal production, using innovative approaches and where possible enhancing the contribution of women and also using sustainable methods are also encouraged.

Review Articles

Reviews on a specific topic usually are written by invitation. Other authors wishing to submit a review should first enquire of the editor whether the topic is of interest to the Journal. A synopsis of the proposed article often will be requested before the writing of the full version is commenced. Reviews should provide a critical assessment of published works that have contributed to the development or understanding of the chosen topic. The soundness of experimental evidence and the validity of conclusions and recommendations in cited articles should be assessed. Conflicting observations and interpretations should be examined and evaluated.

~ Editor, JCVA

CVA News

4th Pan Commonwealth Veterinary Conference 4 - 8 November, 2007. Barbados, West Indies

After the first three successful Pan Commonwealth Veterinary Conferences held in Harare, Zimbabwe, Bangalore, India and Wellington, New Zealand during 1991, 1998 and 2003 respectively, the fourth one held at Barbados, West Indies from 4th to 8th November 2007 was a grand success.

the elite of the profession from all over the world. It would be to the credit of the CVA and the agencies that have supported it to have a representation from almost all the Islands in the Caribbean region.

It would not be an exaggeration to say that never before

gave the opportunity, for the first time, to rub shoulders with





The most important feature of the conference, from the CVA point of view, was the large gathering of the Veterinarians from over 40 countries for most of whom it

in the history of Canada Caribbean region has there been a scientific programme so well planned by the local organisers of the Conference, the Barbados Veterinary Association, and the CVA to cover the most important issues facing



L-R: Dr. Mark Collins, Director, Commonwealth Foundation, Dr. Robin Yarrow, Dr. Gus Reader, President, BVA, Senator Erskine Griffith and Dr. Mark Trotman



Dr Mark Collins delivering his keynote address



L-R: Dr. Mark Collins, Dr. Bert Stevenson, Past President, CVA, Dr. Edward Haughey, Director, Norbrook and Dr. Bob McCracken, Programme Director, CVA



Section of the audience at the inauguration





Section of the audience at the inauguration

both the developed and the developing countries of the Commonwealth.

The scientific programme was designed to meet the needs of both the host country veterinarians as well as the overseas ones.

Out of a total of nearly 300 delegates who registered themselves, more than 150 were from abroad from 40 nations representing all the continents of the world.

The Conference itself was inaugurated by the Minister of Agriculture Senator Erskine Griffith. In his inaugural address Mr. Griffith highlighted the role of veterinarians in today's international environment. He said the Conference theme Animal Health and Welfare: Constant Challenges for Veterinarians implied that in addition to the well-known traditional role played by the veterinary profession, there were new and exciting areas in which such persons could become involved. For instance, he stated, in such fields as aquaculture system that consider the inexorable increase in consumption of fish and other marine products as against

a *capture fisheries production*, which is now at, or close to the biological maximum. There are also areas such as food technology, food safety and biosecurity, which present a new focus of activity, Mr Griffith said.

The Agriculture Minister said that Government was paying close attention to these developments. "You may be interested in knowing that all of these and more are now receiving the attention of the Government of Barbados as we seek to put in place a National Agricultural Health and Food Control Authority to ensure that our exports meet the required international standards and that no unsafe imports come into our Island".

On the subject area of animal welfare, Senator Griffith said standards were increasing worldwide, driven both by consumer of livestock products and by economic arguments. He said the World Organisation for Animal Health (OIE) had embraced the importance of animal welfare and had accepted the reponsibility for being the international standard-setting body to set guidelines in this regards.



L-R: Dr. S. Abdul Rahman, Secretary CVA and Reverend Dr. Wes Hall



L-R: Drs HMSP Herath, RR Asia, Nick Blayney, President BVA and Mark Collins



L-R: Drs Peter Thornber and Michael Sheedy from Australia



L-R: Drs Manuel da Costa and Alipio de Almeida from Timor-Leste, WJ Pryor, Treasurer CVA and HMSP Herath

Visit to Barbados Blackbelly Sheep Farm

Delegates also visited the Barbados Blackbelly Sheep Research and Breeding Unit at Greenland Research Station of the Ministry of Agriculture and Rural Development.



Greenland Research Station

Gala Dinner

The Barbados Veterinary Association hosted a Gala Dinner Cruise aboard Harbour Master on 7th November 2007. The social event was a great success with a number of Barbados veterinarians being honoured on the occasion.

Past CVA Presidents Honoured

The Past Presidents of CVA, Dr Bakary Touray, Gambia, Dr. WJ Pryor, Australia and Dr. Bert Stevenson, Canada were honoured at the inauguration ceremony of PCVC-4 by a Citation of Appreciation for their excellent efforts and hard work in support of the activities of the Association.

In the absence of Dr Touray, Dr Richard Suu-Ire received the Citation on his behalf.

"The World Society for the Protection of Animals, which is represented at this Conference, is spearheading a resolution entitled... "Universal Declaration on Animal Welfare" for the adoption by the UN. Such a resolution will

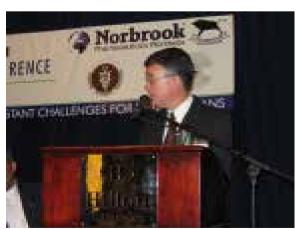


lead to global recognition of standards on animal welfare, in acknowledgement of the fact that good care of animals encourages good growth, performance and production.

Minister Griffith said that it was important to recognise that the formulation of good welfare strategies was important for addressing issues such as human health, disaster preparedness, poverty, sustainable agriculture and social developments.

The inauguration was preceded by an introduction from Dr Mark Trotman, Senior Veterinary Officer, Barbados and a welcome from the President of the Barbados Veterinary Association Dr Gus Reader. The President of the CVA Dr Robin Yarrow delivered the opening address (see Page 14).

The keynote address on the Millennium Development Goals At Half-time: Challenges For The Commonwealth Veterinary Association was presented by Dr Mark Collins,



Dr Robin Yarrow delivering the opening address

Director, Commonwealth Foundation (see Page 23).

The highlight of the inauguration ceremony was the scintilating address by Reverend Dr. Wes Hall, the international Cricket Legend who kept the audience enthralled during his lecture by quoting anecdotes not only from his cricketing career, but also from his personal life.

The inauguration ceremony was followed by a cocktail reception.

Scientific Programme

The scientific programme covering four days and having five simultaneous sessions was so designed to give an opportunity for everyone attending to have access to their special interests. The important themes addressed were Companion Animal Medicine, International Medicine and Public Health, Animal Welfare, Aquatic Animal Medicine, Large Animal Medicine, Role of Women in Livestock Development, Adaptation to Climate Change and Emerging Zoonotic Diseases.

A two-day Workshop on Animal Welfare was the highlight of the Conference with eminent speakers such as Dr Peter Thornber, Dr Kersti Seksel, Dr Michael Sheedy and Dr Robin Vandegraaff from Australia, Dr David Wilkins, Dr David Main, Dr Bob McCracken and Dr Sean Wensley from UK, Dr Lila Miller and Dr Chester Gipson from USA, Dr Oliver Ryan, World Bank, Dr John Fernandes, Trinidad and Tobago, Dr Sam Okech, Uganda, Dr Olatunji Nasir, Nigeria, Dr Monica List, Costa Rica participated in the workshop. In the absence of Dr David Bayvel, Chairman, OIE Working Group on Animal Welfare, Dr S. Abdul Rahman, Member, OIE-WGAW, highlighted the development of International Animal Welfare Guidelines.



At the Animal Welfare session L-R: Drs. Peter Thornber, Chairman, David Wilkins, WSPA and Will Huey, BVA

Speakers at the Conference



Dr. David Main, UK

Dr. Monica List, Costa Rica

Dr. John Fernandes, Trinidad and Tobago



Dr. Robin Yarrow (right) discussing SciQuest



Mr. Oliver Ryan, World Bank



Dr. Michael Sheedy, Australia



Dr. Sean Wensley, UK

Dr. Lila Miller, USA

Dr. Olatunji Nasir, Nigeria

Speakers at the Conference



Dr. Michelo Syakalima, Zambia

Dr. Sina Taulealo, Samoa

Dr. Chester Gipson, USA



Dr. Swarna Herath, Sri Lanka



Dr. Victor Epstein, Falkland Islands



Panel Discussion at the Animal Welfare Workshop



Dr. Kersti Seksel, Australia

Dr. Robin Vandegraaff, Australia

Dr. Tabitha Kimani, Kenya



What went wrong? Repairing a computer glitch

Among the speakers mention should be made of Drs Steve Melman, Diane Frank, Paul Gibbs, Ken Cokanasiga, Lou Gotthelf, Robert Cohen, Clayton Mackay, Paul Geirding, Vicki Bowes, John Cooper, Margaret Cooper, Keith Campbell, R. Baynes, Chris Wanga, Stefanie Czub, Robert Clarke, Gordon Dittberner, John Scanga, Philip Corringan, Julie Horrocks, Barry Kuregar, Michael Ross, Kimberly Stewart, Karen Eckert, Gus Reader, Terry Norton, Charles Manire, Godwin Isitor, Wayne McDonnel, Hugh Ferguson, Janet Waley, Dan Hurnik, Nathalie Ward, Charles Potter, Laurie Gage, Andrea Bogomolni, Claude Theibault, Rupert Pegram, David Speare, A. Adesiyum, Baddley Anita, Tammi Krecek, Michelo Syakalima, Swarna Herath, Tabitha Kimani, Sina Taulealo, Victor Epstein, Peter Hoyle, Greg McGarrell, John Duckhouse, Ezra Devonish, Gerry Thomas,



Jeff Cave, RR Australasia/Oceania Region introducing SciQuest to the audience

Alfred Chikweto, W. Mollineau, A.O. Adogwa, G.W. Garcia, Jonathan M. White, Roger Smith, David Rotstein and Wade Seukeran who were the specialists in their own fields, who gave excellent presentation which were highly appreciated by the audience.

CVA Booth at the Conference Exhibition

The CVA had a stall exhibiting its activities and merchandise which was manned (?) by the spouses of the Officers and Members of the Executive Committee of the CVA.



L-R: Shireen Rahman, Patricia Yarrow, Hilda McCracken and Margaret Stevenson selling CVA merchandise



At the Registration Desk



The BVA Organising Team L-R: Shelly Boyce, Will Huey, Joyanne Pollard, Gus Reader and Michelle Bell



University of West Indies, School of Veterinary Medicine Booth with John Cooper, CVA Councillor, UK (second from left) and Prof. A. Adesiyum (second from right)

Opening Address presented at Inauguration of the Conference

Robin Yarrow President, CVA

The Hon. Minister for Agriculture and Rural Development of Barbados [Hon. Erskine Griffith]

Presidents of National Veterinary Associations

Distinguished Guests, Colleagues, Ladies and Gentlemen

This 4th Pan Commonwealth Veterinary Conference comes at a time of unprecedented change and also extreme challenge for our planet, particularly in terms of the environment, climate and emerging diseases of animals. In fact, emerging diseases of animals, over 70% of which can infect humans and climate change, are considered by some to constitute the greatest challenges of our time!

It is very fitting therefore that both of these pressing issues will be addressed by PCVC4, here in beautiful Barbados.

Pan Commonwealth Veterinary Conferences are CVA's apex and also showcase events. They bring together our stakeholders, in particular our representative country Councillors, from across the length and breadth of the vast Commonwealth, to meet and engage in a Scientific Programme of excellence and relevance. At the same time, this particular Conference will enable all participants to make personal contacts and to widen their networks with colleagues, both old and new from within and also beyond the Commonwealth. In addition, the opportunity is also afforded to our Councillors to deliberate on our CVA strategic responses to priority issues and on our activities, as well as on our governance.

In the process, this key event will address several of our main CVA objectives. Central amongst these are the overall promotion of our profession, the facilitation of contact and interchange as well as the dissemination of professional knowledge and information.

Support for this Conference has come from a number of entities and sources. I mention with particular pleasure, our new principal sponsor Norbrook, a name familiar to many, especially in the pharmaceutical field. PCVC4 is Norbrook's first CVA Conference and we are delighted they are represented here. Other valued sponsors and partners include the Commonwealth Foundation, the Secretariat of the Pacific Community [SPC] the Technical Centre for Agriculture and Rural Cooperation [CTA] of the ACP/ EU Lome Convention and the Australian International Development Agency. [AusAID] I also wish to recognise the wide range of commercial entities which have displays here and are thereby also providing valuable support.

Our Conference theme, 'Animal Health and Welfare - Constant Challenges for Veterinarians' is an especially relevant one and as our promotional flyer states, 'If it affects animals, PCVC4 has someone speaking on it.'

No Pan Commonwealth Conference can be mounted without a great deal of organising and sheer hard work. The CVA Executive is deeply indebted to our partners in PCVC4, the Barbados Veterinary Association and in particular, to their President Dr Gus Reader and his team, for their industry and commitment. While the proof of every pudding rests in the consumption, the recipe, ingredients and early indicators are all very positive. I also wish to acknowledge the respective valuable inputs by my colleague Officers, namely our Treasurer, Secretary and immediate Past President. I might add that spouses are included in this recognition because of their essential support role. I further extend deep appreciation to all of our speakers, session chairs, facilitators and rapporteurs. Deserving of special commendation, is Dr Peter Thornber of Australia, for his sterling efforts in putting together what is clearly likely to be an outstanding Animal Welfare session.

The fact that our entire team is voluntary is also worthy of special mention. That the CVA as a whole is an entirely voluntary organisation, without a single paid staff member, is not always widely known.

That this 4th PCVC is being held in a predominantly island region, is of special significance. Few would disagree with the view that developing small island states are probably the most vulnerable of all countries to the effects of climate change and emerging diseases, as a consequence of their small size, often low lying nature, relative exposure and limited overall means.

Many of the animal health and production issues and constraints facing developing states are common ones across the greater part of the third world. There is considerable merit in sharing experiences, approaches and lessons, both positive and negative, a role which the CVA already plays. Veterinarians and their partner paravets are also the first line of surveillance against the spread of zoonoses, and there is need for greater cooperation and collaboration with medical and other professions. Thankfully, this is now taking place in

be a presentation by the SPC, during our scientific sessions.

The CVA 'connects' a great many veterinarians across much of our globe's surface in a cost-effective way and, in the process also provides an active 'bridge' between the developing and developed Commonwealth. This unique network of veterinarians is an absolute strength and comparative advantage, which can be put to greater use. I am hopeful that PCVC4 will contribute to further advancing this process and worthy objective.

Recent 'most trusted people' polls in several countries have ranked veterinarians very highly, often to fourth or higher position amongst all professions. May PCVC4 also contribute in a small way to strengthening this high professional standing?

Barbados has several other claims to fame, in addition that is, to being one of the most beautiful of island countries anywhere. One of these is that it is the source country of the Barbados Plan of Action for Small Island States, while the other is as the home of the famous Barbados Blackbelly Sheep, a recent most successful export to the Pacific Islands region!

In closing, I do wish PCVC4 every success and equally, I wish each and every participant both a happy and meaningful experience here in Barbados.

Several regions, for example in the Pacific - on which there will John Cooper receives Trevor Blackburn Award

Prof John Cooper, CVA Councillor UK was awarded the Trevor Blackburn Award recently. He was nominated as the recipient of the 2007 Trevor Blackburn Award in recognition of his many contributions in the field of animal health and welfare in developing countries. Currently working as Professor of Veterinary Pathology



at the University of the West Indies, Trinidad, John is a specialist pathologist with particular interests in wildlife and exotic species, tropical diseases and comparative medicine. Dr Cooper is the second recipient of this award.

The award was instigated by the BVA's Overseas Group in memory of Mr J. Trevor Blackburn, President of the BVA in 1984/85, of the Commonwealth Veterinary Association between 1988 and 1991, and of the World Veterinary Association from 1991 to 1995, who died last year.



Trevor and Mary Blackburn

New Officers Of Commonwealth Veterinary Association

The 30th Meeting of the Executive Committee of CVA was held at Island Inn Hotel, Barbados on 2nd and 3rd November 2007. The following were unanimously elected as officers of the CVA for the period of four years w.e.f. 1.1.2008.

Dr. Richard Suu-Ire (Ghana)
Dr. S. Abdul Rahman (India)
Dr. W.J. Pryor (Australia)
Dr. Robert McCracken (UK)
Dr. Robin Yarrow (Fiji)
President
Secretary/Editor
Treasurer
Programme Director
Immediate Past President

Dr Richard was the Regional Representative, West African Region, Dr. Robin Yarrow, the President, Dr. W.J. Pryor, Treasurer continues as Treasurer and Dr. S. Abdul Rahman continues as the Secretary. Dr Robert McCracken is the former President of British Veterinary Association.



President, CVA

Dr Richard Dery Suu-Ire, Regional Representative of West African Region was elected as the President of the CVA at the 4th Pan Commonwealth Veterinary Conference at Barbados, West Indies from 4th - 8th Novermber 2007.



Dr Richard Suu-Ire graduated with Veterinary Medicine from Kishenev State Agricultural University, USSR in 1992 and Postgraduate Diploma in Endangered Species Management, University of Kent (UK) in 2000 and a MSc in Wild Animal Health from the Royal Veterinary College, University of London in 2006. He served in the Veterinary Services Department

as Veterinary Officer in Sunyani District and in Accra Veterinary Hospital. He is at present the Veterinary Officer-in-Charge of the Accra National and Kumasi Zoo and Manager of Accra Zoological Gardens, and Unit Head, Pan Africa Project for the Control of Epizooties (PACE-Wildlife). He is also the Wildlife Epidemiologist to the Veterinary Services Department of Ghana. He is a member of various national and international societies. He was the Regional Chairman, GVMA and Vice Secretary, Secretary and Vice President, GVMA. He has coauthored a book on "Livestock Production in Ghana".

Immediate Past President, CVA

Dr Robin H Yarrow graduated as a veterinarian from University of Sydney in 1968 and has a diploma of Animal Health from London. He served the Government of Fiji from 1969-99 in various capacities not only on veterinary affairs but as a high-ranking official representing the Fiji Government in various capacities. He has worked as Director and Permanent



Dr Richard Suu-Ire being congratulated by Dr. Robin Yarrow



Dr. Richard Suu-Ire (3rd from right) flanked by the EC Members L-R (sitting): Drs Bob McCracken, WJ Pryor, Robin Yarrow, Gareth Bath, Abdul Rahman

(standing): Bert Stevenson, Collin Boyle, Olatunji Nasir, Sam Okech, Nick Gumede, Frank Mwiine, Jeff Cave, Michelo Syakalima Secretary in the Ministry of Agriculture, Counsellor at the Embassy of Fiji in Brussels, Permanent Secretary for Tourism, Civil Aviation and Meteorological Services, Permanent Secretary for Foreign Affairs, Ambassador of Fiji to Japan and Permanent Secretary for National Planning.



In addition to this, he has been on many Boards and

Committees including University of South Pacific Council (USP), chair of Forum Fisheries Committee, chair of South Pacific Environment Programme (SPREP), Intergovernmental Committee, Fiji Museum Board of Trustees.

He has worked as a Consultant for many organisations and government agencies which included Review of SPC's Agriculture Programme, Review of Pacific Islands Centre, Tokyo, Drafting of Small and Micro Enterprise Policy Framework for Fiji, Facilitation of National Biodiversity Action Plan for Dept of Environment, Fiji Government. Reviewed a Draft Land Use Policy for Fiji on behalf of GTZ and reviewed the Foreign Service of Fiji Government (2001).

Dr Yarrow has also been professionally active and has been the President of Fiji Veterinary Association and a Council Member of Fiji to the CVA and RR Australasia/ Oceania Region.

Treasurer, CVA

Dr. W.J. Pryor who has been Council Member of

Australia for 8 years, Regional Representative of Australia for 6 years and Secretary of CVA for 4 years and President of CVA and Past President and Treasurer for 8 years has now been elected again as Treasurer. Dr. Pryor who hails from Scotsburn, Victoria is the former Professor and Dean of the Veterinary School University of Massey, New Zealand and former Dean



of the Veterinary School University of Queensland.

Dr. Pryor has held many important posts during the past. He has been President of the Australian Veterinary Association, President of the Australian College of Veterinary Scientists and President of the Australian Society of Animal Production.

The British Royal College of Veterinary Surgeons (RCVS) honoured Dr. Pryor in 1992, making him an Honorary Associate, the fourth Australian in the two

hundred years of its history. This was in recognition of his development of an international veterinary accreditation system and extensive assistance to veterinary communities in several developing countries.

Dr Pryor has been the recipient of many honours including the award of "Officer of the Order of Australia (AO)" in the Queen's Birthday Honours for Australia in 2001 and "Honorary Degree of Doctor of Science from University of Ballarat, Australia".

He is married and his wife Ann also assists CVA programmes. He has five sons one of whom is also a Veterinary graduate.

Secretary, CVA

DrS. Abdul Rahman, Retired Dean of the Veterinary College, Bangalore, India has been associated with Commonwealth Veterinary Association as a Council Member from India and Regional Representative from Asia. He has been the Editor of JCVA since 1989 and has been the Secretary from 1996.



Dr Rahman was the Secretary General of the Indian Veterinary Association for 11 years, from 1986 to 1994 and again from 1996 to 1998.

Dr Rahman is also a member of the OIE-Working Group on Animal Welfare and an invited member of the WHO-SEAR Committee on Rabies Control in Asia and Vice President of Rabies in Asia Foundation. He is also a consultant on Animal Welfare to World Society for the Protection of Animals (WSPA), London.

Programme Director, CVA

Dr Robert McCracken graduated from Edinburgh University in 1966 and gained his PhD from Queen's

University Belfast in 1968. After a period in mixed practice, he joined the State Veterinary Service, embarking on a career which would span 30 years and culminate in him becoming Chief Veterinary Officer (CVO) for Northern Ireland from 1998 - 2002.



Dr McCracken was awarded the gold medal for

being the most outstanding student in his final year, and during his varied career has lectured extensively in the Faculty of Agriculture and Food Science at Queen's University Belfast and has also had periods of working abroad. As CVO he was at the forefront of the fight against the foot-and-mouth and BSE outbreaks and was instrumental in enhancing Northern Ireland's animal traceability system. He has served as President of the North of Ireland Veterinary Association, the Association of Veterinary Teachers and Research Workers of Great Britain and Ireland, the Poultry

Association of Northern Ireland, Agrarian Society and as the President of the British Veterinary Association from 2004-05.

Other Meetings

A meeting of the CVA Officers with President, President-Elect and Past-President of Canadian Veterinary Medical Association was held on 7th November 2007. Discussion were held regarding the Continuing Education Programmes and the on-going CVA-Atlantic Province Conference



CVA Executive with CVMA Officers L-R: Drs Bert Stevenson, Past-President CVA, Abdul Rahman, Secretary CVA, John Drake, President CVMA, Diane Frank, President-Elect CVMA, Robin Yarrow, President CVA Keith Campbell, RR Canada Caribbean and WJ Pryor, Treasurer CVA

CVA Officers meeting with Director of Commonwealth Foundation

The Officers of the CVA had a meeting with Dr. Mark Collins, Director, Commonwealth Foundation and had detailed discussions regarding CVA projects and the future collaboration between CF and CVA.



L-R: Drs. WJ Pryor, Robin Yarrow (back to camera), Mark Collins, Abdul Rahman, and Bert Stevenson

Programme. Similarly, a meeting was held with Dr Wayne McDonell of Veterinarians Without Borders-Canada.



CVA-Veterinarians Without Borders-Canada L-R: Drs Abdul Rahman, Wayne McDonell and Bert Stevenson

CVA endorses the Universal Declaration on Animal Welfare (UDAW)

CVA endorsed the Universal Declaration on Animal Welfare (UDAW) initiated by World Society for the Protection of Animals (WSPA) at its Council Meeting held on 3-4 November 2007 at Barbados. Dr. Robin Yarrow handed over the signed endorsement to Dr. David Wilkins of WSPA.



Dr Robin Yarrow (2nd from right) handing over the UDAW endorsement to Dr David Wilkins, WSPA (3rd from left). Also in the picture are L-R: Monica List and Marcela Vargas, WSPA Costa Rica and Dr Abdul Rahman (extreme right)

Executive Committee Meeting of CVA 2nd and 3rd November 2007, Barbados

The meeting of the Executive Committee of CVA was held at Barbados on 2nd and 3rd November 2007. Drs Robin Yarrow, President, Bert Stevenson, Past-President; WJ Pryor, Treasurer; SA Rahman, Secretary; Bob McCracken, Programme Director; Mrs HMSP Herath, RR Asia; Jeff Cave, RR Australasia/Oceania; Collin Boyle, RR Canada/Caribbean; GF Bath, RR ECS Africa; Richard Suu-Ire, RR West Africa and Keith Campbell, CVA Councillor Canada and RR-Elect Canada/Caribbean (as a special

invitee) attended the meeting.

The agenda discussed included the organisation of the current PanCommonwealth Veterinary Conference, workplan, projects to be undertaken in different regions and the schedule of various conferences and workshops to be held during the next four years.



Members of the CVA Executive Committee

L-R (sitting): Drs Richard Suu-Ire, RR West Africa, WJ Pryor, Treasurer CVA, Robin Yarrow, President CVA, Herath, RR Asia and Gareth Bath, RR ECS Africa

(standing): Drs Jeff Cave, RR Australasia/Oceania, Collin Boyle, RR Canada/Caribbean, Bob McCracken, Programme Director,
Bert Stevenson, Past President CVA and Abdul Rahman, Secretary CVA









At the Executive Committee Meeting of the CVA



Councillors and delegates from CVA Australasia Oceania Region with CVA Officers

L-R (sitting): Drs. Jeff Cave, Ken Cokanasiga, Fiji, Robin Yarrow, Rakentai Kabatoa, Kiribati and Ilagi Puana, PNG (standing): Drs. Tiria Reri, Cooks, Benuel Tarilomgi, Vanuatu, P. Okesene, Niue, Robin Achari, Fiji, Abdul Rahman, Manuel da Costa, Timor-Leste and Alipio de Almeida, Timor-Leste



Councillors from CVA Canada Caribbean Region with CVA Officers
L-R (sitting): Drs Gus Reader, Barbados, Tracy Challenger, St. Kitts,
Bowen Louison, Grenada, Reginald Thomas, Dominica
(standing): Drs Abdul Rahman, Victor Gongara, Belize, Michael Motta,
Jamaica and Collin Boyle, St. Vincent (in background), A. Benjamin,
Cayman Islands, Gavin Peters, Turks & Caicos,
Joshua Da Silva, Guyana and John Fernandes, Trinidad & Tobago



Councillors from CVA ECS African Region with CVA Officers L-R: Drs Nick Gumede, Joseph Kuria, Michelo Syakalima, Robin Yarrow, Gareth Bath, Frank Mwiine, Pascal Mujini, Sam Okech and Abdul Rahman



Councillors from CVA West African Region with CVA Officers
L-R: Drs Olatunji Nasir, Robin Yarrow, Abdul Rahman and Richard
Sun-Ire



Councillors from CVA UK Mediterranean Region with CVA Officers L-R: Drs Abdul Rahman, John Cooper, Robin Yarrow and Vic Epstein

Council Meeting of CVA 3-4 November 2007, Barbados

The CVA also held its Council Meeting with 33 out of 53 councillors attending the meeting and various issues pertaining to the region were discussed. A questionnaire was circulated to ascertain the important issues pertaining to the CVA which were needed to be addressed by the CVA. The Councillors had a very useful interactive session with members of the EC of CVA.



Regional Meetings of CVA

The Council Members and Regional Representatives of the six-regions of the CVA took the opportunity of their presence at the Fourth Pan Commonwealth Veterinary Conference at Barbados from 2-3 November 2007 to hold their mini-regional meetings (as all council members were not represented) and discussed issues pertaining to their region.

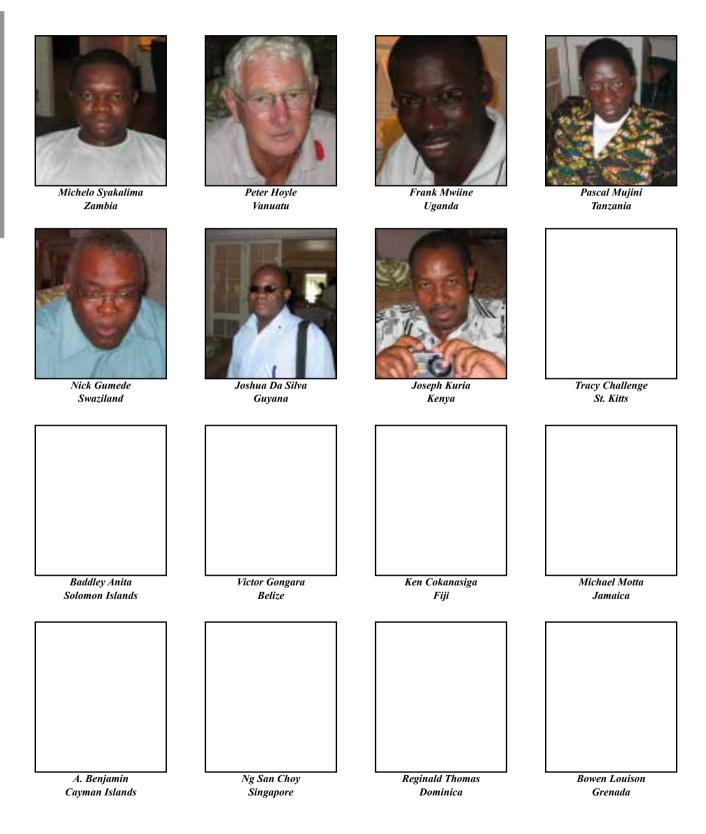


CVA Council Meeting



CVA Councillors with Members of Executive Committee of CVA

CVA Councillors at Barbados



General Articles

The Millennium Development Goals At Half-time: Challenges For The Commonwealth Veterinary Association¹

Mark Collins
Director
Commonwealth Foundation
United Kingdom

Seven years ago leaders from all nations agreed that one major issue lies at the root of most of the world's ills, and that is poverty. Those leaders reaffirmed the rights

of each person on the planet to health, education, shelter and security as pledged in the Universal Declaration of Human Rights, and they confirmed this in the UN Millennium Declaration². By way of an action plan to implement these decisions, they established the Millennium Development Goals(MDGs) to reduce poverty by half by 2015, agreeing that the cost is affordable, the technology available, and the timeframe achievable³.

The UN report on the MDGs at the halftime point of 2007 admits that progress so far is mixed. There have been gains, but much remains to be done⁴.

Recurring problems include the failure of conventional economic growth models to relieve poverty; extreme regional disparities; inadequate spending on health and education; and insufficient development aid. There is genuine concern about the failure of donor governments to live up to the Monterrey consensus of delivering 0.7% of GDP as overseas development aid, and the Gleneagles Agreement to double development aid spending by 2010. There is also widespread disappointment that in too many countries governance is still poor, corruption remains widespread and commitment to the goals is weak. A major shift in political will is necessary to realise the ideals of the universal Millennium Declaration⁵.

Indeed, some commentators are saying that the MDGs are a failure. In the Commonwealth we do not agree. The MDGs are robust, and the world wants no new promises. We want to achieve the ones we already have, and we can do so with a combination of three vital ingredients. Firstly, nationally owned development strategies and budgets must be aligned with the Goals. Secondly, they must be backed up by sufficient resources from development partnerships between donor and recipient nations. And thirdly, all

countries should practice good governance within a democratic framework that empowers all citizens and allows even the smallest boat to float on the rising tide.

In this context, we should not think of the MDGs as something top down that only people in power can address. In the Commonwealth we know that everyone has a role to play, including governments, the private sector, civil society and individual citizens.

What do we mean by civil society? We mean all those organisations and associations in which citizens come together voluntarily to identify their priorities, advocate them, in many cases finance them, and increasingly

execute them. From the smallest coffee morning fundraiser to the supra-national power of some large philanthropic foundations, citizens today express their views and assert their authority in every walk of life. The Commonwealth Veterinary Association (CVA) is a wonderful example of this.

In the Commonwealth we are proud that there are more than 80 voluntary Commonwealth associations, many of them professional bodies that are important networks for foresters, doctors, teachers, nurses, engineers and, of course, veterinarians. We believe that these networks are important forces for change that can bring benefit to the 600 million Commonwealth citizens, who still live in poverty.

But networking for change can also mean changing the networks. All our organisations need to identify and select priorities, establish clear goals, and pursue them through the strength of our network. Networks can be enormously powerful, but they are a means to an end, not an end in themselves. Form must follow function; outcomes must drive process; and internal procedures must be geared to external needs.

There are added benefits from this approach too. By carrying out these analyses, networks as individual and specialised as the Commonwealth Journalists, Commonwealth Dentists and Commonwealth Foresters can find common cause in external challenges. The Commonwealth Foundation demonstrated this in a meeting last year looking at what professionals and their networks could do to help small economies adapt to climate change. We had input from about 20 professional networks and the momentum is still growing. It is increasingly important for professional associations to build cross-links with other associations in different walks of life to discuss issues of the day, such as the MDGs.

How may veterinarians and the professional associations in which they work help to achieve the Millennium Development Goals? This meeting is taking place in the Caribbean, where many nations have made good progress on the MDGs, but the battle is not yet won. Small island developing states are amongst the most vulnerable to climate change, emerging diseases and other external shocks, and ground gained can all too soon be lost.

Poverty has many dimensions and the MDGs include eight objectives addressing income poverty, hunger, disease, lack of adequate shelter and exclusion, while also promoting education, gender equality, and the environment. Let us briefly remind ourselves what they are, and also indicate their respective significance to veterinary science. All these goals have some relevance but, for the purpose of this paper, four of the eight goals have a direct bearing on the veterinary profession, while a fifth is also relevant.

1. Eradicate extreme poverty and hunger	High
2. Achieve universal primary education Low	
3. Promote gender equality and	
empower women	High
4. Reduce child mortality	Low
5. Improve maternal health	Low
6. Combat HIV and AIDS, malaria and	
other diseases	High
7. Ensure environmental sustainability High	
8. Develop a global partnership for	
development	Medium

There are many specific targets linked to these goals, but rather than describe them, this paper tries to put them into a veterinary context and identify some achievable targets from a veterinarian's point of view.

The first goal aims to halve the number of people living on less than a dollar a day by 2015. The good news is that the latest figures published by UNDP indicate that worldwide the number of people in developing countries living on less than a dollar per day is 980 million, down from 1.25 billion. The

bad news is that unfortunately a disproportionate number, perhaps as many as 600 million, are in Commonwealth countries, many of them in sub-Saharan Africa and southern Asia⁶. And without doubt the great majority of these poor people are either subsistence farmers with livestock settled on small plots, or nomadic pastoralists.

In Sub-Saharan Africa livestock agriculture is the most important industry, representing 25% of GDP of the region. But Africa also has the heaviest burden of animal disease, with 12 of the 15 most contagious diseases listed by the World Organization for Animal Health (OIE). Moreover, the spread of livestock diseases has worsened in recent years. For example, contagious bovine pleuropneumonia (CBPP), which was quite well controlled in the 1970s and 1980s, has again become widespread, affecting 27 countries across the continent, costing US\$2 billion per year according to FAO, and creating a major impediment to export markets⁷.

Clearly, veterinarians have a direct role in contributing to improving poor farmers' incomes and nutritional status, in particular by improving animal health, nutrition, reproduction and economics of production. This requires adequate support from state services, to ensure that drugs, vaccines and information are all made available at affordable prices. And of course veterinarians should also be working in close collaboration with the private sector and other relevant service-providers, for example in health and education.

But in reality veterinary services for farmers are in decline in many developing countries, due to restricted funding, weak government veterinary service provision and shortages of veterinarians in many rural areas. National Veterinary Associations in developing Commonwealth countries need to be especially articulate, vocal and focused in advocating to policy makers the need for veterinary activities and services for the poor, and they should get technology transfer, capacity support and perhaps even financial support from counterpart institutions in the developed world. There is clearly work for the Commonwealth family here.

Although there is no time to expand on the subject, we should not forget fisheries. With capture fisheries reaching their limits, major opportunities for aquaculture are emerging, a field in which veterinarians are well-qualified to contribute skills and knowledge in the fight against poverty.

Arguably the most critical constraint on achieving the Millennium Development Goals is the inequitable treatment of women in many Commonwealth societies. Women's participation in paid, non-agricultural employment has continued to rise slowly, but this is mostly in urban areas. Women in developing countries are much more likely than men to work in agriculture. Over 60% of unpaid family

workers are women, lacking access to job security and social protection. Women play a vital role in achieving the MDGs in education, nutrition and health. They often play a disproportionate and very important role in the raising and management of animals but this goes unrecognised and unrewarded. There should be greater opportunity for women to obtain advice and hands-on training in livestock care and production. Associated with this, we should find ways to ensure that women benefit economically as well as in other ways, from their time and efforts in managing livestock, and also participate more in the decision-making process within the livestock enterprise.

Veterinarians can and should support this approach, wherever this is possible. This is a point clearly recognised by the CVA in its grass roots project scheme, through which several projects targeting women have been successfully implemented in recent times in Kenya, Zambia and India. Projects of this nature can provide inspiration for many, and they have been commended in India in particular, by both national and overseas non-governmental organizations (NGOs).

Of course these principles also apply in our civil society networks, where participation by women needs to be encouraged.

The sixth goal is to combat human disease, but history tells us that human disease all too often derives from disease in animals, both domesticated and wild. And that trend is certainly continuing as contact with animals increases.

Over the past 25 years 38 apparently new species of human pathogens have been recognised⁸. Of these, some of the biggest human killers have arisen from contact with animals - the so-called zoonotic diseases - they make up 70% of emerging and re-emerging diseases. Recent evidence suggests that HIV and AIDS originally arose from contact with chimpanzees in southern Cameroon infected with Simian Immunodeficiency Virus (SIVcpz)⁹. Although the HIV epidemic came to light in the USA in the early 1980s, it now seems that the earliest cases may actually have been recorded in Kinshasa as long ago as 1930.

One can only speculate as to whether the epidemic might have been avoided if veterinarians had been working more closely with physicians at that time. What we can certainly infer is that veterinarians are needed wherever regular human contact with wild animals presents a risk.

In the domestic animal sector other frightening new zoonotic diseases have included Bovine spongiform encephalopathy (BSE) and the associated variant of Creutzfeld Jakob Disease (vCJD), both being difficult to diagnose and untreatable. More recently avian influenza, of which more in a moment, has become a major concern.

There are two main modes of disease transmission from animals. In the first the animal is the direct source of infection, as in Rabies, West Nile virus, Brucellosis and vCJD. In the second group the initial source is animals but then human to human transmission occurs, as for example in HIV, Ebola and Marburg viruses and Yellow Fever.

There is some likelihood that the risk of zoonoses could increase in future, both from domestic and wild reservoirs. In the domestic context, intensification of animal husbandry, inappropriate feeding systems and increased transportation of domestic animals all add risk, particularly to rural workers in the developed world. Urban areas are now expanding at 3% per year, bringing ever closer proximity between human and domestic livestock populations and an increase in factory farming in many countries, thereby increasing the risk of transmission of zoonotic diseases.

In the developing world contact with animals in the wild is now a major concern. The rapid growth in bush meat hunting brings more people into contact with fresh, potentially infected meat and risks the spread of zoonoses, particularly in Africa. And the risk is not confined to the hunters themselves. In Nairobi¹⁰ it has been demonstrated through DNA analysis that meat sold as beef in butchers' shops is often contaminated with meat from antelope, zebra and other wild animals, although not usually primates, which perhaps present the greatest risk¹¹.

In Africa a profound decline in veterinary services is adding to the problem, since slaughterhouses are not checked, diseased animals are not identified, and transgressions of basic standards often go unpunished.

In forest regions logging roads are providing easier access for hunters, and the demand for bush meat from urban centres is growing. There are indirect drivers too. Believe it or not, on the West African coast it has been reported that artesanal fishermen are switching to hunting inland as a result of foreign industrial trawling offshore, which depletes their fish stocks and destroys their already meagre livelihoods¹².

Perhaps most frightening is the prospect that deadly viral haemorrhagic fevers like Marburg and Ebola, which appear to come from bats, or possibly monkeys, could quite easily mutate into less virulent forms that would have a far better chance of spreading across Africa and worldwide. For this reason the bush meat trade is much more than just a worry to conservationists.

Comprehensive programmes for detection, identification and monitoring of new zoonotic diseases have been suggested, but would require new ways of working and potentially huge resources¹³. At this point, much could be gained by cheaper and easier programmes simply to raise awareness of the risks and promote para-veterinary monitoring.

Acute human respiratory tract infections such as pneumonia, bronchitis and bronchiolitis constitute the world's worst diseases, causing 6.8% of all human deaths, amounting to more than 4 million people every year. They are associated with a range of bacterial and viral pathogens able quickly to produce new forms, and they too are generally zoonotic in origin¹⁴.

The most important concern today comes from the new form of avian influenza, H5N1. This is a disease primarily of wild birds, but it has now become epidemic in poultry of all kinds. The World Organisation for Animal Health (OIE) says more than 240 million poultry have died or been culled in the current outbreak¹⁵. This has had enormous socio-economic impact on rural communities, particularly in Asia.

According to the World Health Organisation (WHO) avian flu first appeared in 1997, reappeared in 2001, but the virulent H5N1 strain took hold in 2003¹⁶. The OIE says the current epidemic of avian influenza began in southern China and Hong Kong in 2003, spread across Asia to Russia and the Baltic states by 2005, then to western Europe, reaching UK, France and Germany. It has now been confirmed in 61 countries¹⁷. The fact that the disease reached 25 of those 61 countries in 2007 gives an indication of the speed of the spread. Within nine months from now it is expected to be in every country in the world. The potential impact in terms of loss of food and income of the rural poor, particularly in Southern Asia, could be severe, representing a major setback to the progress of MDG 1, the fight against poverty.

We also have to consider the potential impact of bird flu on the health-related MDGs, goals 4, 5 and 6. Just how great a risk is the disease to humans? So far it remains essentially a disease of birds and is inefficient at infecting humans. Nevertheless, it is a deadly disease against which humans have no immunity, and has infected about 100 people, half of whom have died. The fear is that it could easily and quickly mutate into something much more easily transmitted between people, for example by "swapping" genes with a human flu virus.

This transition into a more virulent form is exactly what happened in the case of Spanish flu in 1918. To put it into perspective, the First World War caused 10 million deaths, while Spanish flu killed between 25 and 50 million. Similar outbreaks in 1957 (Asian flu) and 1968 (Hong Kong flu) were milder, killing 2 million people and 1 million people respectively.

WHO fears that H5N1 could potentially infect 40% of the world's population and the Centre for Disease Control and Prevention in the USA predicts that H5N1 could kill between 2 and 7.4M people. Low income countries will suffer most because of poor healthcare facilities, a high proportion of young people, and extensive rural communities in daily contact with poultry. Veterinarians have a key role to play in terms of early diagnosis, improved handling practices, and treatments.

In terms of MDG 7 on environmental sustainability, we need to consider a range of issues including the impact of livestock on the environment, the impact of a changing environment on the health of livestock, and the ways in which human disease can spread to already endangered species.

Human-induced climate change is already having a serious impact on livestock patterns and health. Significant areas of Australia are reportedly no longer suitable for cattle ranching and are slowly being abandoned. Without doubt the same is happening in Africa, but with more serious implications for the MDGs since pastoralists are small-scale and poor, with fewer alternatives for migration. A cycle of overstocking, drought, desertification and soil degradation is impoverishing communities living in marginal lands.

At the same time, heavy rainfall and flooding, such as we have seen recently in Ghana and Uganda, can affect the health of livestock, particularly as climate change facilitates the spread of pests such as ticks which carry blood protozoans, and mosquitoes, which carry diseases like Rift Valley Fever and West Nile Virus.

In low impact pastoralism animal waste is part of a natural cycle, but in more intensive situations it can contribute to serious pollution. Solid waste, both faeces and carcasses, can pollute water courses and aquifers if best practice is not in place. Emissions, mainly of methane, from large numbers of ruminants contribute significantly to climate change, and research to reduce this through special breeds or improved foodstuffs, is ongoing.

Veterinarians are also well qualified to contribute to the protection and sustainable utilization of natural biodiversity. The issues are very wide-ranging and complex. For example, avoidance of human-animal contact through hunting could help conserve African primates, but only if alternative domesticated food sources are made available otherwise primate habitats could be considered useless and destroyed to obtain other income, for example from logging.

There are many examples where human diseases are transmitted to wild animals already in need of conservation. For example, *Toxoplasma gondii*, a microorganism which causes food-borne disease in humans, has spread to

California sea otters, causing lethal brain damage¹⁸.

Veterinarians are also faced with ethical and animal welfare issues. For example, the challenge of providing traditional indigenous stewards of cetacean resources in the Pacific with a sustainable benefit from hunting, in the face of strong opposition from welfare and conservation groups. Veterinarians are certainly not immune from the world of politics!

It is not widely recognised that the MDGs came about after almost four decades of disagreements and debates between rich and poor countries - the process was not a smooth or easy one. Goal 8 is central to the achievement of the MDGs because it embraces the notion of a global partnership based on shared responsibility. Whilst developing nations would improve governance and channel resources towards the first 7 goals, the rich countries would focus on more effective aid, faster debt relief, more trade opportunities and increased technology transfer.

This international support is critical, especially for the smallest and most vulnerable countries. Thirty five of the Commonwealth's 53 countries are small economies, and 25 are small island states, so Commonwealth members need to show particular leadership on Goal 8, not only through their governments but also through their private sector and civil society organisations.

At the same time, governance and funding of government services in many developing countries is far from satisfactory and veterinary services are no exception. They are not always perceived as important when compared to other competing needs, and international and bilateral donors should strengthen veterinary advisory, diagnostic and livestock production services. Intergovernmental organisations like the OIE and the FAO must reconfirm and address the links between veterinary science and the achievement of the MDGs.

But we must beware of always looking to governments to take the lead. Often it is professional and civil society organisations that are better placed to do the ground breaking and take practical action. Networks like the Commonwealth Veterinary Association and its constituent national bodies can play an important advocacy role in order to encourage organisations, inter-governmental, commercial and civil society, to support national veterinary and livestock services in developing countries in need.

There are already good examples of projects which demonstrate support to the achievement of the MDGs. One recent example is the decision by the New Zealand Veterinary Association to improve developing world access to its on-line continuing education SciQuest network¹⁹. This

is so important when the cost of a veterinary education is so high and access to veterinary information often hampered by the digital divide. A second is the Canadian Atlantic Provinces Veterinary Conference's support for a female veterinarian from Trinidad to make a professional study visit to Nova Scotia earlier this year. Such exchanges can have widespread and lasting impact. And the CVA projects in India and Africa, which help to demonstrate how to build the capacity of women and girls in livestock management, is yet another good case. In all of this we should not forget the importance of south-south links too. There is growing recognition that peer support at this level is very effective.

It could be said that the Commonwealth Veterinary Association is itself a partnership in the sense of MDG 8, well-placed to help spread the benefits of veterinary services between the 'haves' in the veterinary world and the 'have nots'. The key thing is to strengthen that partnership, ensure that every national association can see that it has something to contribute to the wider good, and to recognize that the benefits of membership far outweigh the costs.

In summary, the Millennium Development Goals present some real challenges if they are to be achieved by 2015. Nevertheless, they remain robust and with national and international commitment and political will, much can be achieved. Livestock represents a major asset for the poor, particularly in Africa, and the veterinary profession is well-placed to contribute to the achievement of the goals. Working through professional associations such as the Commonwealth Veterinary Association, veterinarians can advocate for, and deliver, improved veterinary support to the poor, demonstrate technologies and methodologies appropriate to the setting, and encourage research and development aimed specifically at the rural poor, who need it most.

Barbados is the origin of the iconic Barbados Black Belly sheep, a hardy non-wool tropical meat breed, which has demonstrated suitability for similar island situations and has real potential to improve the economic lot of poor farmers while also enhancing nutrition, food security and land use. Commonwealth countries like Fiji, Samoa and Tonga are all expanding their domestic sheep industries, based on the Barbados Black Belly sheep, and it is good to see these Commonwealth connections flourishing.

This Conference of the Commonwealth Veterinary Association provides a high quality scientific programme on a wide range of priority issues and allows for reflection on the core activities, achievements and future approaches of the organisation. I would like to congratulate the organising team, and wish all of you a most enjoyable and productive stay in Barbados.

GENERAL ARTICLES

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English is a crazy language

There is no egg in eggplant, nor ham in hamburger; neither apple nor pine in pineapple. English muffins weren't invented in England or French fries in France . Sweetmeats are candies while sweetbreads, which aren't sweet, are meat. We take English for granted. But if we explore its paradoxes, we find that quicksand can work slowly, boxing rings are square and a guinea pig is neither from Guinea nor is it a pig.

And why is it that writers write but fingers don't fing, grocers don't groce and hammers don't ham? If the plural of tooth is teeth, why isn't the plural of booth, beeth? One goose, 2 geese. So one moose, 2 meese? One index, 2 indices? Doesn't it seem crazy that you can make amends but not one amend? If you have a bunch of odds and ends and get rid of all but one of them, what do you call it?

If teachers taught, why didn't preachers praught? If a vegetarian eats vegetables, what does a humanitarian eat? Sometimes I think all the English speakers should be committed to an asylum for the verbally insane. In what language do people recite at a play and play at a recital? Ship by truck and send cargo by ship? Have noses that run and feet that smell?

English was invented by people, not computers, and it reflects the creativity of the human race, which, of course, is not a race at all. That is why, when the stars are out, they are visible, but when the lights are out, they are invisible.

PS. Why doesn't "Buick" rhyme with "quick".

~ Anonymous

Women In Livestock Development In Asia*

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Abstract

The contribution of women to livestock production has slowly been gaining recognition during the last decade. Production animals play a crucial role in the rural economy and Asian women handle most of the key jobs related to them from feeding, milking, cleaning animals and their sheds, detecting illness, care of new born, to cutting grass, dung composting, making dung cakes as fuel and to the tasks of processing and marketing. Involvement of women varies between socio-economic groups and regions and ethnicity. Livestock management is an extension of other household responsibilities and work of the woman in a family.

In the Asian countries under consideration, rural women in different categories such as small farmers, labourers, and entrepreneurs are involved in production of most of the food for their countries. Bangladesh women constitute 45.6% of the farming population being involved in rice production, forestry, fisheries and livestock production, especially poultry production. In rural India, agriculture and allied industrial sectors employ up to 89.5% of the total female labour force. 90.5% of women in Nepal are engaged in agriculture, in livestock production and forest resource use. In Pakistan 79.4% of rural women participate in the production of major crops. In Sri Lanka 41.5% of the employed women are engaged in agriculture and allied sectors.

In India, a female leadership programme was successfully implemented during the late 90's in dairy cooperatives. An NGO has played a leading role in organising the women milk producers in cooperatives in India. The CVA funded Muthanallur project in Bangalore for women dairy farmers is helped by the National Dairy Development Board in Anand in the provision of training. In Rajasthan in India six projects for women dairying were completed in 2005. Female participation in dairy cooperatives in Sri Lanka was recorded as 55%. Women also are taken into mainstream development through the Vanitha Shakthi Bank programme at village level, in Sri Lanka. The first prize winner for the best buffalo farm at the National Livestock awards - 2007 in Sri Lanka was a woman farmer. In Nepal programmes,

helped improve rural communities through provision of goats to families and provided support to women farmers and entrepreneurs in the poultry sector.

Such developments to improve women's role in livestock production, and thus counter poverty, supplement the already critically important role of women in Asia, and are receiving increasing attention by government and NGOs though much more needs to be done.

Introduction

The first International Conference on Women in Agriculture held in July 1994 in Melbourne, Australia was designed as a forum for women in agriculture to share their experiences and learn about successful farming and agribusiness techniques. Subsequently at the second International Conference on Women in Agriculture in Washington in 1998 it was stressed that women need strong networks and sound information to tackle new technical and social changes facing today's agricultural and rural communities. Following the adoption of the Jakarta Declaration for the Advancement of Women in Asia and the Pacific (1994), and the Beijing Declaration and Platform for Action (1995), significant achievements were made in empowering women in the region. Their economic participation has shown uneven but steady progress with gender differentials in wages falling in many instances. The socio-economic structures in the rural sector are the primary organisations of production in which women play a pivotal role in most parts of the developing world. In the rural areas of these countries, women work in all capacities, in growing food, post-harvest operations, marketing, animal husbandry and related activities. In some cases, they also work as wage labour on farms. The FAO has estimated that sometimes women's work hours could be longer than men's work by as much as 43%

In the last decade or so the contribution of women in livestock production has gained due recognition. Livestock play a crucial role in the rural economy and it is accepted that women handle most of the critical jobs in the livestock farms like feeding, milking, cleaning, cutting grass, care

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of newborn and administration of medicine etc. However, there is variation in the involvement of women between socio-economic groups and regions and their ethnicity. For example in tribal, low rainfall, semi-arid and arid areas in India much of the work with regard to animal management has to be looked after by women due to migration of males for work. Most of the women are found to be the sole bread winner in the families in North and East part of Sri Lanka due to the death of men under the prevailing war situation in that region. In other parts of Sri Lanka women's involvement in various types of livestock varies with the agro ecological zones and very often it is a sharing business between the husband and wife in families. In most traditional Asian agro-pastoral societies, apart from performing about 2/3 of the duties of crop cultivation, women also manage water and feed in small ruminants and other micro-livestock kept at the homestead, while men herd the other animals. (Finney 1988). In Bangladesh, women own and manage small ruminants. In countries of Northern Asia where temperatures are lower (Nepal, North China, Mongolia and Korea) the animal hair or wool is an important additional product and is entirely in the hands of women (Stephens 1990).

Livestock management is an extension of other household responsibilities and work of the woman in a family. In developing countries, rural women of different categories such as small farmers, labourers and entrepreneurs are involved in production of most of the food for their country. Six out of ten workers in Asia are found to be women. In one out of three households around the globe, women are said to be the bread winners. In intensive livestock systems, more than three quarters of livestock-related tasks are the responsibility of women. Government organisations and some NGOs in the Asian region are making an attempt to develop teams of women para-extension workers who could be effective in providing information and improving the skills of women.

Participation of Women in Livestock Production and Agriculture

In Bangladesh women constitute 45.6% of the farming population and are actively involved in rice production, forestry, fisheries and livestock production In rural India, agriculture and allied industrial sectors employ as many as 89.5% of the total female labour and they have an active role and extensive involvement in livestock production, forest resource use and fishery processing. 90.5% of women in Nepal are engaged in agriculture as against 74.9% of men and they play an active role in livestock production and forest resource use. In Pakistan 79.4% of rural women are engaged in agriculture as against 60.8% of rural men and extensively participate in the production of major crops; the intensity of

their labour varies by crop and specific crop management tasks. In Sri Lanka nearly 41.5% of the employed women and 35.4% of employed men are engaged in agriculture and allied sectors. Nearly 68% of the Sri Lankan women in agriculture, work in plantations and more than 70% of rural women are involved in subsistence production.

Women's Involvement in the Livestock Sector

Bangladesh

Livestock is an important component of the farming systems in Bangladesh, and cattle, goats and poultry are the most commonly reared animals. Cattle are raised mostly for draft power. Goats and poultry are raised primarily as a source of cash income. In Bangladesh women are, in general, responsible for livestock and poultry rearing. Poultry rearing is a traditional activity performed by women for income generation. Feeding livestock, cleaning sheds, securing animals properly for the night and seeing to health care are the activities performed by women. Women take care of the farmyard manure collection thus reducing recycling, which has important consequences for soil fertility. Owing to their crucial role in livestock care, women are generally consulted while buying and selling livestock (Abdullah and Zeidenstein, 1982).

India

In India, livestock play a multi-faceted role in providing draught power for the farm, manure for crops, energy for cooking and food for household consumption as well as for sale in the market. In animal husbandry women have multiple roles in taking care of animal production, this varying between regions. Their activities vary widely ranging from care of animals, grazing, fodder collection, and cleaning of animal sheds, to processing milk and livestock products. In livestock management, indoor jobs like milking, feeding, cleaning, etc. are done by women in 90% of families while management of male animals and fodder production are effected by men (Narayanan, 1997).

Women accounted for 93% of total employment in dairy production (World Bank, 1991). Depending upon their economic status, women perform the tasks of collecting fodder, collecting and processing dung. Dung composting and carrying to the fields is undertaken by women. Women also prepare cooking fuel by mixing dung with twigs and crop residues. Though women play a significant role in livestock management and production, women's control over their livestock and its products is negligible. The vast majority of the dairy cooperative members are men, only 14% being women (MOA, 1991).

Nepal

Livestock is an important component of the Nepalese farming system providing food for humans, manure for plants, and draft power for farms and cash income for farm families. Cattle, buffaloes, sheep, goat, pigs and poultry are the livestock species reared across the different agroecological zones. In Nepal, women are actively involved in livestock production. They play a major role in the management and care of farm animals by contributing about 70% of the work in livestock rearing. Fodder collection, grazing and milking are generally performed by both women and men, whereas activities like feed preparation, feeding, cleaning sheds and preparing milk products are women's domain (Acharya and Bennet, 1981; Katuwal, 1990). Women have a crucial role in detecting illness of the animal because of their close and frequent contact with them. Marketing of livestock is mainly done by men, but in consultation with women. Women have the right to own livestock in Nepal. Girl children also share the responsibility for herding goats. Livestock, particularly dairy production, is a major source of income for women (APP, 1995) and sale of livestock and livestock products accounts for nearly 55% of total farm family income (Conlin and Falk, 1979). Trading in livestock, especially sheep and goats, and wool and woolen products, is the major livelihood strategy of hill and mountain people in Nepal as food grain production in these regions is inadequate. Women play a major role in the management and care of farm animals by contributing about 70% of the work in livestock rearing. Their role is particularly important in day-to-day decisions on grazing, collection of fodder and forest leaf-litter, collection and consumption of water, application of compost, and the use and home-based processing of livestock products.

Pakistan

In Pakistan, livestock is an important component of farming systems. It accounts for 26.4% of agricultural production value (Mumtaz, 1993). Animals are raised for draft power, milk and meat. Poultry, sheep and goats are very important to rural women because they are often the only source of income fully under their control (ESCAP, 1996). Women make a considerable contribution to livestock production, more visibly than in crop production. A rural woman in Pakistan works 15.50 hours a day, spending 5.50 hours in caring for livestock, providing only 50 minutes for the care of her own children (Hashmi, 1988). Women involved in caring and rearing of animals and poultry, carry out a wide range of tasks such as making feed concentrates, feeding, collecting fodder, grazing, cleaning animals and their sheds, making dung cakes, collecting manure for organic fertilizer, as well as milking, processing and marketing animal products

(making ghee, selling eggs, etc.) (ESCAP, 1997). In Pakistan, women are responsible for 60% to 80% of the feeding and milking of cattle (ESCAP, 1996). Women in Sindh and Punjab spend from one-fifth to a quarter of their daily working hours in livestock-related activities (Anwar and Bilguees, 1976; Freedman and Wai, 1988; Ouadri and Jahan, 1982). Dairy production is very important for women in most provinces except Baluchistan where the climate is not favourable to dairy cattle raising. With the exception of a few large cities, all fresh milk consumed in Pakistan is based on small domestic production run and managed by women (Paton, 1986). Women play a crucial role in rural poultry farming. Over 90% of rural families keep an average of 12 adult birds per family and hatch chicks under a brood hen. The women apply their own methods of rearing, brooding, breeding, and management based on the experience handed down from the elder family members (Qureshi, 1988).

Sri Lanka

Livestock is an integral component of farming systems in Sri Lanka. Women have the major responsibility for raising livestock and poultry. Cattle are raised mostly for milk and draft power, goats and poultry primarily as a source of cash income. In Sri Lanka, goat-raising projects have proved to be successful income-generating activities for poor rural women. This has been a very popular farming system encouraged under Integrated Rural Development Project. With regard to milk production, there are several female-headed family groups very keen to take up cow-rearing for milk production as a self-employment activity. This not only earns a regular income, but also provides improved nutrition for the children in the families (Pillai, 1995). In Sri Lanka women in rural villages are usually expected to provide hard labour for domestic activities with little time for leisure. 40% of the agricultural workers are women and their share is highest in the age of 25 to 54 years. Agricultural workers have ventured to set up employment projects with much preference shown for livestock (cattle, buffalo, goat and pig) rearing, poultry farming and fish breeding. A sample survey done in April/May 2005 with 235 livestock farmers spread throughout the country where women's participation was prominent, in order to study the involvement of women farmer in livestock production in Sri Lanka has revealed that 19% of the farms were headed by women (17.80 % - unmarried, 13.31% - divorced and 68.89% - widows) being involved in the family affairs as the bread winner. Out of these 19% women farmer owners 26.6 % were engaged in dairying, 24% had back yard poultry coupled with dairy farms, 20% of this group had poultry as self employment and the balance had integration of two or three different types of livestock species in their farms. In these women-headed families the woman was engaged fulltime in cleaning, feeding, cutting grass, bathing animals, milking and marketing the product. She spent an average of 6.5 hours per day on these farm activities. In rural families where both husband and wife were owners, 50% of the work relating to livestock farming was handled by the wife and marketing of milk products and keeping accounts were the main task of the man of the family. In his absence, the woman took the responsibility. Their grown up sons also assisted in marketing.

Women's groups in the Livestock Sector

The 1994 IFAD publication on women livestock managers pointed out that in many countries it was more acceptable to work with groups of women rather than with individual women. This was often the only way for poor women to obtain sufficient resources such as material, capital and labour to initiate activities. Women's groups and cooperatives can often help poorer women to start market-oriented livestock enterprises (Niamir-Fuller, 1994).

The group approach with women has been tried in various projects, including those in Nepal (goat-raising), India (dairy), and Sri Lanka and Bangladesh (chickens), and has been successful in involving women in the decision-making aspects and in giving poor women an alternative to poverty (Finney 1988) . Some special considerations applying to specific livestock production sectors follow.

a. Dairy sector

The Indian woman dairy farmer deserves the major share of the credit for bringing the country almost up to the highest level in milk production in the world. During the last two decades the importance of women in dairying has been recognised and steps taken to encourage their participation on a larger and more significant scale. The Ford Foundation in the states of Andhra Pradesh and Bihar has funded the formation of dairy co-operative societies for women led by women and managed by women. In order to facilitate efficient functioning of all women's co-operatives, a cadre of women extension workers have been recruited and trained.

Since the late 1980s the National Dairy Development Board (NDDB) of India has placed major emphasis on women's education as part of their co-operative development programme, an activity designed to strengthen the role of women members in the control and governance of the dairy co-operatives. It was reported in 1998 that some 6,000 out of the 70,000 dairy co-operative societies in India were women's societies (Amrita Patel 1998). At that time the percentage of women members in the societies was around 20 per cent. A programme called the Women's Dairy Co-operative Leadership Programme was successfully implemented in four districts of the country during the latter part of the 90s in order to raise the percentage of active

women members in dairy co-operatives, the percentage of elected leaders at every level and the numbers and status of women employees. As a consequence, present day Indian women have more control over the sale of milk and also the use of income from it. Another positive development is the recognition of women as members of dairy co-operative societies, so that the price of milk supplied to the society can be paid to the women directly.

In Sri Lanka, the Sangruwanketha Dairy Cooperative Society in N'Eliya District with 16400 members has a female membership of 30% (Herath 1998). In a sample study carried out in 2005 in the Central Province of Sri Lanka with 235 farm families it was shown that 77% in the study group were dairy cooperative members, Out of these members of the Dairy Cooperative 55% were women. However a very few were engaged in the preparation of dairy products. Some made curd and milk toffee and market at their neighbourhood. These women farmers were members of at least one of the village level societies such as Village Development Societies, IRDP, Sanasa, multipurpose cooperative societies, welfare societies, farmer organisations, Samurdhi, Kantha Samithi etc.

b. Goat sector

Goats are usually looked upon as an asset that is easy to convert into cash and an animal, which can be conveniently handled and managed at low cost. Heifer Project International Nepal programme (HPI/N 2006) is a legally registered non- profit organisation operating in Nepal which helps in improving rural communities through a women's group approach. The target communities are located in two different districts of Terai, Pipra Pokhariya in Rautahat district and Shantipur V.D.C in Dhanusa district of Central Nepal, south of East-west highway. In two communities, women have formed 6 groups with an average of 20 members in each group. In Rautahat, separate groups for children, women and men have been formed to bring immediate change in the community. These families have united into one group and have begun group savings and credit, advocacy and other group activities expecting to bring change much faster and also empower them.

Each of the 113 families in the women's groups were provided with two healthy native female goats of breeding age. In addition to this, 10 breeding bucks were provided to these groups. HPI has provided 10% of value of livestock and freight for insurance of the project animals and the local NGO will be fully responsible for insuring these animals. The project participants contributed by constructing appropriate housing facilities for the goats utilising locally available materials. Each family would plant fodder tree seeds/seedlings and grasses on wasteland, marginal lands

and bunds of the fields, terraces, and other suitable spaces available to facilitate zero grazing and control soil erosion while feeding the goats using the cut and carry system. Goat manure would fertilise crop production. Crop by-products from gardens and fields along with kitchen refuse were to be used to supplement the goat feeding. Families were provided with vegetable seeds to increase production and to bring a change in their nutrition.

These women's groups elected executive committees to run the group activities. Each group would meet once a month to make decisions regarding progress of the project. Participants provided their labor and locally available material resources for successful implementation of the project. The project provided a micro credit loan to 25 women for leasing crop land and producing paddy crops. The families participating in this programme were to pay loan on installments every 6 months for a period of 2 years. Two active community members were to be trained as village animal health workers (VAHW) who would provide animal heath services to the women groups.

The project provides a revolving fund to the women's groups for veterinary medicines. The women's groups lend this revolving fund through an interest free scheme to VAHW upon the request to maintain necessary stock of veterinary medicines. They must return this fund upon discontinuation of their service to women groups. The District Veterinary Hospitals and nearby veterinary service centres provide technical back-stopping to VAHWs for animal health care. The community of Rautahat were to participate on social mobilisation for its sustainable holistic development. As part of these trial 75 adult men, 75 adult women and 75 youths (10-16 years) were to combine into different groups of 20-25 persons and be trained on HPI Cornerstones which are leadership, group management, sanitation and community hygiene, nutrition and income, kitchen gardening, human development and health and other pertinent issues faced by this community.

It is planned to train two active members from Janakpur and Rautahat in village animal health work. 134 members were to make exchange visits to other HPI projects in Nepal in the first and second year. Each of 113 goat recipient families will have to pass on at least two healthy female goats to new needy families of other groups. If the initial offspring is male, then it will be sold and the proceeds will be used to purchase a female kid for passing on the gift. Similarly, the original groups will have to pass on 10 breeding bucks to the new recipient groups. The family that keeps the breeding buck was to charge a reasonable fee for the breeding service. In addition to the goats, the original families will also have to pass-on the gift of skills of improved goat raising. Likewise, the group

will also pass on vegetable seeds to other families. The project participants will have to complete the first generation gifting of goats within 2 years. (HPI/N 2006).

c. Poultry sector

An interesting example is DHAKA - IFC Advisory Services for South Asia-the South Asia Enterprise Development Facility-and the Women Entrepreneurs Association of Bangladesh who have signed an agreement in April 2007 to provide support for women farmers and entrepreneurs in the poultry sector. The project includes a series of training workshops that are designed to enhance technical and business management skills. There are also guidance sessions to help women entrepreneurs to improve their businesses. This initiative will increase productivity and generate income for women in the sector and it is part of a larger strategy to develop Bangladesh's agribusiness sector. In 1996 it was established with 1 million smallholders in Bangladesh and with support from the Danish Development Agency, Asian Development Bank, the International Fund for Agriculture Development, and the World Bank.

The target group was rural women belonging to the poorest segment of the village population and female-headed families had first priority. The facilitator (NGO) provided the learning process through group formation, awareness programme and extension support for establishing and maintaining the concept. The beneficiaries operated under free market condition and no subsidies were involved at beneficiary level. At the end of the 2nd project year, the family income had increased by more than 30 %, the nourishment had been improved, and the savings have drastically been increased. The savings have been mainly used to start other income generating activities. Traditional backyard poultry raising is a source of low cost, high quality food for the family and small cash for women through sale of birds and eggs.

Studies of rural women in India have indicated that they look at backyard poultry from a holistic perspective. Most women have not been interested in expanding poultry production and using improved breeds and they have been very clear in indicating that they prefer the local breeds and keeping the size of the flocks within certain limits. The major interest of women in backyard poultry is as a source of small returns and nutritious food for the family at low cost. Women are not interested in increasing the number of birds due to the management difficulties and the need for external inputs it would require. It has been noticed that the majority of the families from western India were interested in selling birds. Some families have undertaken production of chickens which they sell to people who plan to rear the birds. Families of peri-urban and urban areas have shown interest in improved breeds and commercial scale production. Discussions with women from interior rural and underdeveloped areas have revealed specific priorities for development support.

In Sri Lanka most of the rural development projects comprise poultry production and very often the beneficiaries are women. Birds are given to small groups of women whose members guarantee each other for the sustainability of the farms. Improved backyard poultry production not only improves income of women but also contributes to family nutrition. Women poultry farmers receive an average monthly income of US\$15-60 with two exceptional cases which will be described later in this paper along with stories of highly successful women dairy farmers. Livestock contribution from farmers to their economy varies between 50% - 100% except in Kilinochchi, a war affected area in North East province of Sri Lanka, where farmers face difficulties in marketing. Integrated Food Farming Security Programmers in Trincomalee in North East Province of Sri Lanka where the rural poor have been affected due to long standing war and women social mobilises play a vital role in organising rural women.

Empowerment of women

In India the Self-Employed Women's Association (SEWA), an NGO, has played a leading role in organising women milk producers in cooperatives. They also assist in making the benefits of Government schemes available to poor milk producers. To name a few: the Andhra Pradesh Dairy Women's Program, the Bhagavathula Charitable Trust's Women's Dairy Program and SEWA's Women's Dairy Cooperatives. SEWA is an organisation of 158,000 women workers in Gujarat in western India. Its experience in the arid zone of Banaskantha district has shown that among the many inputs, fodder is the key to milk production. This could also become part of the larger program of ecological restoration. All the defunct primary societies in Radhanpur and Santhalpur Talukas (administrative and geographical blocks consisting of an average of 80-100 contiguous villages) of the district have been revived, strengthened and consolidated.

There are 5679 women's societies at village level all over the island functioning under the Sri Lanka Women's Bureau and 171 governing councils (Balamandala) have been established at regional level. These organisations have been strengthened by the government in order to ensure their participation in implementing development programmes. Training programmes are conducted for improvement of leadership qualities of the members of these organisations. Women are taken into the main stream of development through economic development programmes such as Entrepreneurship Development, Vanitha Shakthi Bank

programme at District level, revolving fund programmes at village level, trade fair programmes, business promotion programme (Start Your Business under ILO), and the Diriya Kantha programme.

Recognition given to women livestock farmers in Asia

CVA funded Muthanallur project for women dairy farmers in India. (Rahman, 2005). During the second Pan Commonwealth Veterinary Conference held at Bangalore in 1998 the Commonwealth Veterinary Association extended a helping hand to Muthanallur, a tiny village 65 km south of the city of Bangalore in India in the particular area of education. The main occupation of the inhabitants of this village was Seri culture. Most of the people are dependent entirely on livestock for their livelihood as there is not enough water for agricultural purposes. Each farmer has only one or two cows / buffaloes and each are entirely dependant on its milk for their sustenance. However their children did not have the opportunity to drink their milk and instead survive on a beverage made up of gruel from millet and tapioca. Livestock such as buffaloes, sheep and birds have also been donated to the farmers in the past. With the support of CVA these women farmers received an opportunity to train in better methods of livestock production. Women farmers actively engaged in dairy husbandry were sent for training in dairy production every year to the premier dairy institute of the country, the National Dairy Development Board (NDDB) at Anand, Gujarat to undergo training in feeding, care and management of their livestock. Other agencies such as Village Cooperative Society, Farmers' Banks and Insurance Companies have contributed subsequently and continued the programmes initiated by the CVA.

About 150 thousand women in Rajasthan State in India are earning their livelihood through dairying. Six projects for women's dairying were completed in the year 2005. Recognition was given for Women in Dairy sector at Rajasthan in 2005 through prizes:

- to the women's milk cooperatives that had collected the maximum amount of milk,
- to the women, who had collected milk for the maximum number of days,
- to best performing elected women president and women secretary.

Thirty farmers including women from self-help groups (SHG) participated in the training programme on marketing strategies for farmers rearing turkeys under a semi- intensive system, conducted by Veterinary University Training and Research Centre, Thanjavur, Tamilnadu, India in 2006. The

farmers were given training in hygienic handling and value addition of turkey meat.

Thirty women from SHGs in Districts of Cuddalore, Karur and Theni, in Chennai, India underwent training on "Scientific Quail Farming" conducted at the Poultry Station, Nandanam in Chennai in 2005 under the Department of Biotechnology (DBT) scheme on empowerment of women Self Help Group through entrepreneurial training in scientific quail production.

Examples of Successful Women Farmers in Sri Lanka

Rural people in the livestock sector in Sri Lanka were given a boost by being encouraged to participate in the National Livestock competition held in March 2007. Thousands of dairy farmers all over the country participated in this competition and I am proud to record that the first prize winner for the best farm was a woman dairy farmer Mrs. Ramanee Subasinghe from the Dambara village of the Horana Veterinary Range in the western province of Sri Lanka, where veterinary services are also provided by a dedicated female veterinarian Dr. Anusha Liyanage. Ramanee won a motor bicycle, a Friesian cow and LKR. 25000/= (\$US225) as first prize.

This exemplary woman farmer is from a traditional farming family and is a widow with two sons and a daughter. She is 46 years old and was widowed 16 years ago. Daughter of a farming family, she had to give up her hobby of dairy farming and curd-making after her marriage. Later to supplement her husband's daily income she, with her husband's support, started making curd with collected milk from her neighbours and also started a small dairy farm with buffaloes, purchasing 2 acres of land. Unfortunately her husband died when she was in her thirties leaving the responsibility for three little children on her shoulders. Being inspired by her parent's courage and her husband's love she determined to raise her dairy farm to the status of an enterprise continuing her farm and the curd business. Fifteen years later she now owns a dairy with nine milking buffaloes, two heifers of Nili Ravi breed and three milking cows of temperate breed (Jersey and Friesian).

Her curd business was a success with production between 500 to 1000L a day. The amount of milk (60 - 80L) for this business comes from her farm and the rest from a group of 25 farmers from her poor village via the milk run she operates in the neighbouring villages. She pays Rs. 25 to 30 for each litre of milk she collects from other farmers. This village has about 400 families.

Mrs. Subasinghe has established 5 acres of fodder

land with CO-3 (Combatoure - Cross between Pannisetum purpureum and Pannisetum americanum) fodder variety and leased out 35 acres of land for feeding grass for her dairy. She has put up typical cattle sheds with adjacent buildings for hay store, drug and feed store. "Kandawatta curd" is her farm product and she possesses two vehicles for the delivery of the curd pots to the super markets. She has employed 3 boys and 5 girls as permanent workers and another 5 casual workers in the enterprise. She herself draws a salary from her farm and utilises any saving solely for charity work. Out of this she buys saris for the teachers in the charity centre in her village and clothes for school children of that centre.

She spends her day in a very systematic way.

- 4.00 am Rise
- 4.00 6.00 am Attend to day's schedule, account for 20 delivery points.
- 5.30 am Worship
- 6.00 am -8.00 am Check vehicles for day's travel, prepare breakfast.
- 8.00 am-10.00 am Supervise the workers milking, or milk herself, clean and feed her animals and the supervise other workers in curd making, prepare mid day meal.
- 10.00 am Have bath
- 3.00 pm Supervise milk collection and curd preparation
- 4.30 pm Milk animals in her farm.
- 7.00 pm Watch TV and prepare dinner.
- 9.00 pm 11.00 pm Go through day's accounts on milk collection and sale of curd pots.

Her children are now grown up. She has trained her young son in all the activities related to her enterprise. She has a strong belief that her son will continue this business. For this year her target is to establish a sales outlet for fresh milk at the Horana hospital with two thousand patients and to buy a hot and cool milk machine. She gives a day's milk to all pregnant mothers in the hospital free of charge every month.

For the year 2008 her plan is to improve her cattle shed with modern facilities including a sick bay, rooms for pregnant cows and calves etc. and also to have a pharmacy which serves their farm and the other villages. She is planning to go to Kerala, India to get exposure to the outside world and study more about farming and business. For all these expenses this exemplary lady saves money from her enterprise which she started in very small way with her husband's support 16 years ago.

Another example of special achievement is Regina Aluvhare, who was selected best dairy farmer from Peradeniya, Kandy in the central province of Sri Lanka and has been engaged for 40 years in dairy farming. She is the wife of an employee at the University who does not have time available to assist in her dairy farming activities. She started her farm with four cows and currently has 15 milking cows, 20 heifers and four dry cows. Her farm produces 80 to 90 litres of milk daily and milk is delivered to the MILCO Company. She is now getting ready to have a sales point on her own. The characteristic feature of this farm is that she does not own any land. Her house and the farm building occupy 25 perches. All grass for her farm is cut and brought from neighbouring lands in Peradeniya. She is the president of Rajawatta Farmer Managed Society of Dairy farmers.

Two further exceptional cases are young women who received formal training from the Department of Animal Production and Health and utilised their knowledge on their self improvement while assisting others to uplift their lives (Herath, 2005).

Kanthie Priyadarshini from Kegalle in Sabaragamuwa province obtained knowledge on livestock farming after attending the training on "Poultry as Self Employment" conducted in 1999 by the Department of Animal Production and Health. She started her enterprise with 50 day old pullets and increased the number up to 300 laying birds. With the success of this small poultry unit she has entered into broiler farming which has a capacity of 100000 birds. She is now an entrepreneur with four employed labourers earning 1000 US \$ per month. She spends 6 full hours on activities in the poultry farm such as feeding plus, collecting eggs and cleaning poultry pens.

In 2003 with the threat of avian influenza in Asian countries she was alert. She did not want to take the risk of having only poultry and losing it in case the disease spread in to Sri Lanka. She sought further training in dairy farming and preparation of dairy products. Having saved a considerable amount of money and keeping that as a guarantee she was able to obtain a loan from Wayamba Development Bank and purchased 5 ha of land to establish a dairy farm. She is now ready to face any challenge in her life. She spends a contented life giving her two children a good education. It is good to note that she owns a vehicle too and her present income is US\$ 1200 per month.

Young Sanduni Maheshika of Dummalasooriya from North Western province was exhausted from facing interviews seeking government jobs and decided to have a casual job in a boutique. Savings from this minor job helped her to purchase 50 pullets but it was not successful as she

did not have any background knowledge in poultry keeping. Fortunately for her she had an opportunity to join a three month training course in self- employment through poultry production at Undugoda conducted by the Department of Animal Production and Health. With this new knowledge of management she started a poultry farm with 500 pullets obtained on a soft loan. Encouraged by the success of her layer farm, she opened up a broiler unit with 500 broilers subsequently. She improved her knowledge further by attending a "Small scale Agri-business management" course and expanded her farm. This enterprise was further strengthened after her marriage to a colleague, a selfemployed poultry farmer. Her marriage did not interfere with her ownership of the poultry farm; instead of just taking the responsibility for the farm, her husband started incubating turkey, quail and native birds. This young couple now receive many orders from the public for distribution of chicks from their hatchery. In turn they purchase turkey and quail from the farmers around them and supply the tourist hotels. Thus Sanduni plays a big role in promotion of poultry production in her area while solving the marketing problems of the small scale farmers around her and maintaining a profitable poultry farm and a hatchery with moral and practical support from her husband. They earn more than US\$ 2000 per month now.

Conclusion

The decisions taken at conferences held since 90's on the empowerment of women have shown significant impact on women's involvement in livestock development. Women in Asia are playing a substantial role in eradicating poverty in society generally both by being directly involved in livestock farming and also engaged in livestock extension or managerial fields. Low income populations in Asian countries included in this review have common features related to animal husbandry. Women, very often the bread winners of the family, have a bigger role to play in the progress of the family unit. Livestock farming paves the way to uplift the status of women in the developing countries under study. Maintenance of large animals in farms is not a limiting factor for women's involvement in livestock farming as shown in studies in India and Sri Lanka.

Women in the livestock sector are gradually entering the mainstream of development in their countries and becoming the partners in the country's economy. This is due to the efforts taken by the Government organisations as well as NGOs to enhance the abilities of these women farmers. Formation of women's groups in this endeavour is found to be an effective tool in approaching the communities of women with low literacy and transferring new technologies into the farming communities. It is important to identify women who perform extra - ordinarily in the field of

livestock farming using them as models to encourage their neighbours to organise themselves into farming groups. With the leadership of such outstanding women farmers increasing livestock development in their countries, women's share in improving the economy and thus assisting in eradicating poverty should be assured.

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Enhancing Livestock Management Skills Amongst Maasai Pastoral Women Of Magadi Division In Kenya: A CVA Funded Kenya Women Veterinary Association Project*

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Introduction

The Kenya government in its Economic Recovery strategy paper has identified agriculture as an important tool and vehicle for the realisation of its objective, namely to create employment and reduce poverty. The livestock sub-sector being a major component of agriculture, plays a vital role in the sector's contribution both at national and household levels. For the government to achieve its objective through the sub sector there is need to concentrate efforts on improving livestock productivity to meet the expected increase in the welfare of livestock keepers and the country. To be able to achieve this, the various constraints to livestock production including diseases and poor market access, need to be addressed. The country has a livestock population of about 60 Million animals and up to 10% of the gross domestic product (GDP) and 30% of the farm gate value of agricultural commodities originate from livestock. About 80% of the livestock population is in the arid and semi arid lands (ASALs) where the prevailing production systems are pastoralism and agro-pastoralism where production and productivity are low.

The government in the economic recovery strategy also aims to promote public private partnerships in delivery of various services to enhance efficiency and output. Kenya women veterinary association is one of the professional associations partnering with the government to improve development of the ASALs through livestock. The association promotes livestock development through capacity building of the local community in livestock management skills. Initially the association carried out what could be called hit and run training where a community was brought together in a day or two and offered a semi-structured training with no follow up thereafter. The trainings were highly appreciated but the impacts of the training were low. The members during a review of its activities recommended continuous structured trainings especially for ASALs and it was within this context that the association successfully applied for a grant from Common Wealth Veterinary Association in 2005.

Magadi Divisions in Kajiado Districts was the project proposed area. The major selection criteria was based on prior knowledge gained during the previous "hit and run" training in the area. During the training it was found that the livestock management skills especially among the Maasai women were low. The Division lies in the South Western side of the country, in the Rift Valley Province.

The Division lies at an altitude of about 500-700 metres above sea level, with a bimodal rainfall pattern averaging 350-500 mm annually. Temperature varies from 15° to 30°C. Most of the land is ASAL and the vegetation ranges from wooded grasslands, open grasslands and semi-arid bush lands and shrubs, while the terrain ranges from plains, occasional volcanic hills and valleys. The Nguruman escarpment lies in the north-western side of the division and is source to several rivers which are significant sources of irrigation water. Lake Magadi lies in the Division. This paper presents a project report highlighting achievements, challenges and the way forward.

Overall Project Objective

The overall project is to contribute to pastoral development for poverty alleviation and food security through enhancing livestock management skills amongst Maasai pastoral women

Purpose

The project purpose is to strengthen the capacity of the Maasai community in disease management, value addition of livestock products, to adopt livestock keeping as business and increase rural incomes.

Thrusts of the Project

The five thrusts of the project include

• Conduct baseline survey of the project area

^{*} Paper presented at the Fourth Pan Commonwealth Veterinary Conference, 4th - 8th November 2007, Barbados West Indies,

- Facilitate the formation of women groups in the project area.
- Promote capacity building and livestock management skills directly to women
- Produce training module that can be utilized by trainer of trainers (TOTs)
- Produce a booklet on livestock issues in ASAL areas targeting women.

Project Beneficiaries

The pastoral community and especially women in Magadi Division are the primary beneficiary through improved animal health and increased rural incomes. The secondary beneficiary is the Veterinary Services in Kenya through complement activities that promote its core functions of securing the country's livestock assets.

Timeframe

The project was expected to run from year 2004 -2006, but the activities have not been completed and it's therefore in progress.

Project Budget

Grant received from CVA was US \$ 5,010.46. In addition, to the grant KWVA has mobilized more than US \$6,000.00 for the project activities

Expected Outputs

Four outputs were expected to spur development which has a socio-cultural dimension

- 1. Increased resource (land) management
- 2. Increased livestock productivity
- 3. Increased social capital
- 4. Increased animal welfare

Key Outputs

1. Baseline Survey

The first activity implemented was a baseline survey conducted by an association socio-economist. The activity was undertaken in three out of four administrative Locations of Magadi Division. The major objective of this component was to one, establish whether the project objective was relevant to the needs of the community in addition to assessment of training needs. Individual household interviews and participatory approaches were used to collect

the baseline data. In total eight focus group discussions, five key informants and 83 households were interviewed. Separate group discussions were held for women and men

The major findings and their implication for training include

- About three quarters of the respondents had no formal education while the rest had primary, secondary or post secondary education. Only 1% had tertiary education. The low levels of literacy imply that farmer-based disease control practices should require low levels of numerical literacy.
- Livestock keeping was the main economic activity while irrigated horticulture farming and other petty trades were minor.
- The livestock species kept were mainly indigenous or indigenous crosses cattle, local sheep and goats.
 Donkeys and chicken were also kept but to a lesser extent.
- 4. Sample livestock farmers earned a total of Ksh 10 million from the various livelihoods annually. 66 % of this originated from sale of live animals, which was followed by off farm income (22%), crop income (8%) and lastly milk sales (4%).
- The households primarily depended on livestock for income and food and therefore any improvement in livestock would go a long way to promote economic and food security
- In addition to providing food and economic security, the roles of livestock also revolved around socio-cultural uses and owning.
- 7. Women had limited access to the livestock assets and were only allowed to control income from milk, hides and skins while men owned the animals and controlled income from the sale of live animals. Due to poorly developed milk, hides and skins market, the income directly to the women was low. Training on value addition and on marketing of the products would offer a good opportunity to increase the income.
- 8. Animal diseases were a major production constraint. The most important disease constraint in cattle was anthrax followed in order of decreasing importance by tick-borne diseases (anaplasmosis, East Coast fever and babesiosis), heart water, foot and mouth disease, trypanosomosis, lumpy skin disease, ephemeral fever, malignant catarrhal fever and contagious bovine pluero pneumonia (CBPP). Tick borne diseases caused high mortality, morbidity and control costs losses while

animal trypanosomosis caused high morbidity and control costs losses and low mortality losses. 42% of the animal health budget went into tsetse and trypanosomosis control. Important disease in sheep and goats included trypanosomosis, contagious caprine pluero pneumonia (CCPP), helminthiasis, anaplasmosis, sheep and goat pox, heart water and orf. In poultry, Newcastle and ectoparasites were mentioned as constraints. Training would offer a great opportunity to cut down the high costs of production associated with disease control

- 9. The veterinary infrastructure was inadequate with respect to personnel and other resources. The local veterinary staff (two in number) are located at least 50km away from most of the farmers, lack transport and communication facilities. As a result, animal health extension services were inadequate or absent within the project area. Training (a form of extension education) by the project would be an eye opener to the community that the services exist in addition to addressing the disease constraints. Due to the inadequate vet services, the farmers treated their own animals with drugs purchased from local agro vet shops.
- 10. Farmers had poorly adopted improved animal health technologies such as tick control, vector control and also lacked adequate livestock management skills. The worst affected were women who never made contact with extension agents.
- 11. Animal diseases were poorly understood and drug misuse was prevalent.
- 12. Livestock management skills amongst the farmers differed and were influenced by local household's level of contact with two Institutions that had been carrying out trypanosomosis research.
- 13. Women primarily performed the tasks of milking animals, watering young and sick animals, taking care of sick animals, marketing of milk, hides and skins, and to an extent managing animal diseases. They also owned the poultry assets where cultural beliefs limited adoption of poultry as an alternative livestock.
- 14. The disease management skills amongst the women were passed to them through their husbands and fathers.

There was a need to boost the inadequate livestock management skills among the pastoralists and especially the women and therefore the survey declared the project relevant to the community and if conducted properly it would make huge contribution to improvement to the livestock based livelihoods. Key training recommendations from the survey include

- 1. The project need to broaden the clientele to include men to enhance adoption of the new recommended practices
- If possible mix men and women in training to remove suspicion that the women veterinarians will be empowering the Maasai women to rebel against their cultural practices.
- 3. Due to inadequate transport and communication infrastructure, it would be more sensible to split the entire project area (Magadi Division) into four smaller areas along administrative boundaries of Locations. The Division has four administrative Locations namely, Oldonyonyokie, Olkiramatian, Magadi and Shompole. Project activities could start within Oldonyonyokie which is the Location nearest to Nairobi, accessible through tarmac road and had also minimal contact with research institutions.
- 4. Other organizations especially those dealing with public health and community development had already facilitated formation of women groups and there was no need to form others. The same groups could be used to mobilize women for training.

2. Facilitate Formation of Women Groups

Based on recommendation no new groups were formed but the association went ahead to identify the existing groups in the project area and had a meeting with the women leaders to introduce the project to the community. The local administration and community leaders (all males) attended. Leaders from 10 women groups attended the meeting. The project was well received especially by the women. However, the men stressed that they too need to be involved in order to appreciate the improved practices and allow their women to adopt them.

3. Preparation of Training Materials

Several meetings were held in the following sequence, the first was to disseminate the findings of the baseline survey to the association members, the second was to identify the issues that need to be addressed through training and identify subject matter specialists for the different areas. The third to fifth was to develop the training materials

The following key areas were picked for training

- Vector borne diseases (trypanosomosis, all tick borne diseases, lumpy skin disease and ephemeral fever)
- trade sensitive trans-boundary diseases such as rinderpest, foot and mouth disease, and CBPP,

- 3. zoonoses- Rabies, hydatid disease, taenia infections, brucellosis and anthrax
- 4. sheep and goat management including control and prevention of prevalent infections in the species
- 5. Opportunities to use adoption of poultry to diversify local economy and increase income for women, management of poultry and their diseases
- camel and donkey management
- 7. management of dogs
- 8. adoption of livestock keeping as a business and not as a way of life
- 9. rational use of drugs and pesticides
- 10. value addition of milk, hides and skins
- 11. Proper use of vaccines at the farmer level
- 12. Optimal use of available resources through grazing and drought management

4. Capacity Building of the Local Community

Based on the baseline survey recommendations, Oldonyonyokie Location which has two administrative Sub Locations was chosen as the first site to receive the trainings. The training was structured in such a way that two simultaneous trainings workshops were held in the two Sub locations at Oldonyonyokie and Kamukuru trading centres. All women leaders together with the local administrators mobilized especially the women to attend the trainings. In total six training workshops of two days each were conducted and were found to be adequate in covering the whole training curriculum in the first two sites

During the last training workshop, which coincided with a prolonged drought in the area, extra field activities were also incorporated to officially launch the project in the area. The launch was attended by association members, Commonwealth Veterinary Association (CVA) country representative, well wishers, pharmaceutical companies and top policy makers in Veterinary Services department. The community received donations valued US \$ 5,700.00 through deworming and vaccination of animals against rabies, sheep and goat pox and CCPP. Hay and human food stuffs were also donated. The first phase of training was conducted between October 2005 and March 2006. In total 300 farmers were trained, a third of whom were women.

Before the training activities kicked off in phase 2, an evaluation of the previous training program was undertaken with a view to improve the knowledge transfer. It was based on the lessons learnt from the past trainings. Due to difficulties in accessing the rest of the administrative

Locations, the trainings were designed in such a way that the unit workshop days were increased to three while the topics covered were condensed so that during a single visit to an area, the whole package would be delivered. Though the next phase of activities were planned to take place in May 2006, they did not take off until a year later due to two major issues, one the high alert on highly pathogenic avian influenza threat issued to Kenya and prolonged rains, flooding and outbreak of Rift Valley fever in the country. All resources including the association members were deployed into preparedness activities and outbreak control.

In the second phase of the project, another Location, Olkiramatian was selected for project activities. Within the Location, Musenge Sub Location which is occupied by a marginalized sub clan of the Maasai was thought to be ideal for capacity building. The community cited that they had never received any form of capacity building in livestock management. A three day training workshop was held in May 2007. A total of 100 farmers attended, 30 of them were women.

Kenya Government through the Department of Veterinary Services has been the major collaborator through provision of four wheel drive vehicles, drugs and technical capacity.

The faculty of Veterinary Medicine University of Nairobi has assisted the project by providing young Maasai undergraduate students for translation during the training.

Main impacts/ lessons learnt/challenges from capacity building activities

- During the first phase of training the farmers greatly appreciated the topics of livestock keeping as a business and poultry keeping as this was the first time they had received such kind of information. Later one male community leader adopted commercial poultry (broilers) keeping. Another female community leader started keeping indigenous chicken. This shows that inclusion of males in the trainings was beneficial to the community and poultry keeping could be a major avenue for livestock diversification to both increase household incomes and minimize risks.
- Literacy levels are low to an extent that any written and locally translated materials for livestock keepers use may be of little use in the project areas. Majority of them depended on their school going children to read the written materials and interpret to them.
- While fixed training venues are important in order to avoid confusion, trainers should consider changing venues to fit into pastoralist's practices as long the

change is communicated to as many as possible. E.g. holding meetings at venues where the farmers are holding other activities such as markets and traditional ceremonies.

- It is not possible for all farmers to attend all training sessions and therefore receive full training packages.
- More and more women need to be trained because they do take care of the young and weak animals left at home.
- The community really appreciated the trainings since it was the first of its kind in that area.
- Livestock farmers have reported reduced mortalities associated especially with Heart water which was previously perceived as not having a curative measure and caused high mortality losses
- The local community talks very highly of KWVA.
- KWVA training sessions has led to improved collaboration between farmers and the local veterinary staff who have participated during the project activities.
- KWVA provided a forum where the livestock farmers had an opportunity to register their issues with the Director of Veterinary Services during the launch of the project
- Though illiteracy level is very high, the degree of interest shown by the pastoralists during the trainings was very encouraging and the messages were received with enthusiasm.

KWVA is preparing another proposal to seek funds from donors to extend project activities to the whole of Magadi Division. In addition to training, other new activities such as awareness on the impacts of HIV/AIDS on livestock productivity and promotion of girl child education have been included in the proposal. In the meantime, the remaining CVA funds when received will be used to develop a training manual and booklets on poultry keeping for use by pastoralists.

5. Way Forward

Rare Livestock Breeds Facing Extinction

At least one livestock breed a month has become extinct over the past seven years, according to a recent report by the Food and Agriculture Organisation of the United Nations (FAO) on the state of the world's animal genetic resources.

The report - compiled by the FAO with contributions from the International Livestock Research Institute with headquarters in Nairobi,

Kenya, and other research groups - draws on reports from 169 countries and represents the first global assessment of livestock biodiversity and of the capacity of countries



to manage their animal genetic resources. It urges the international community to adopt a global plan of action to stem the loss of the world's farm animal diversity and protect the global food supply.

A total of 7616 livestock breeds are recorded in the FAO's Global Databank for Animal Genetic Resources. According to the report, around 20 per cent of the world's breeds of cattle, goats,

pigs, horses and poultry are currently at risk of extinction.

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A Longitudinal Study Of Backyard Pig Systems In Samoa*

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Introduction

Most Samoan families own pigs; at the 2000 Agriculture Census, 77% of Samoan households had a pig holding, where a pig holding comprised at least 1 breeding sow (Anonymous, 2000). This census also numbered pigs in Samoa at 167,316. These pigs are raised in backyard holdings, the majority of which are free-range. Most confined systems consist of a fenced dirt enclosure; a few systems use cement floor housing. There are no commercial pig holdings in Samoa. Pigs are mainly for home consumption, for example suckling pigs are commonly slaughtered and roasted for a special occasion; as well as this, they are used for ceremonial gifts. Farmers will also sell pigs to people who are looking for animals for these purposes. There are some sales of weaner pigs to butchers and restaurants but there are no commercial pig farms in Samoa.

The Ministry of Agriculture's Animal Health Service provides the only veterinary service to these pig holdings. There is no available baseline information on pig productivity (farrowing and weaning rates) and mortality in backyard pig holdings in Samoa. This study was implemented as a way to obtain this information. As well as this, we wanted to determine if the Animal Health Service was attending to a reasonable representation of sick pigs in the population, or if there was a large number of holdings that were not reporting sick animals at all.

Materials and Methods

With funding from the Commonwealth Veterinary Association and the Ministry of Agriculture, a longitudinal study was carried out on backyard pig holdings on Upolu Island, Samoa starting in 2005. A total of 28 pig farms were enrolled in the study from March 2005 to June 2005. Of these, one group of 13 farms was randomly selected from the list of pig-owning clients in the veterinary case database of the Animal Health Service. The second group of 15 farms, which were not clients of the veterinary service, was randomly selected from a list of taro plantation owners who were clients of the Crops Division of the Ministry of

Agriculture. Three farms were dropped from the study due to lack of interest of the owners. Two more farms were excluded because they could only be followed for 6 months, leaving 23 farms in the study.

All farms were visited every 4 to 12 weeks, for 12 to 18 months. Adult pigs were each assigned a unique identification number and were identified by their physical appearance (colour and markings) and by ear notches made by their owners. Unweaned and weaner pigs were identified by their litters and dam. The following information was recorded during each visit:

1. Adult information

- Adults present in the herd and the condition score of each
- Adults no longer in the herd since the last visit, and the cause of their loss
- Farrowings since the last visit

2. Litter and grower information

- Litter birthdate (for newly enrolled litters)
- Number born alive (for newly enrolled litters)
- Number born dead (for newly enrolled litters)
- Number of losses from litters and grower group and the date and cause of each, if known
- Date of weaning

It should be noted that under free range systems, just prior to farrowing, some sows seclude themselves and do not come home for up to 3 weeks. For these sows, litter birthdate was recorded as the time the sow left the herd for farrowing. Number born alive was the number of piglets that returned with the sow. Number born dead could not be assessed for these litters. Herds were identified as "free-range" either if the pigs were allowed to roam freely all the time or roamed freely during the day and were locked into a fenced area at night. Confined herds either spent all their time in a fenced enclosure on dirt or in housing on cement.

^{*} Paper presented at the Fourth Pan Commonwealth Veterinary Conference, 4th - 8th November 2007, Barbados West Indies. 2 EpiCentre, Massey University, Palmerston North, New Zealand

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Owners were encouraged to contact the Animal Health Service in the event of an illness or death in the herd so that the cause could be investigated. They were also asked to note ill animals since the last visit - these were described as those pigs that were inappetent, lethargic, and generally unthrifty compared to the other animals in the herd or compared to the individual's normal state. Other common signs of illness that farmers were asked to look out for were diarrhoea, weight loss, paralysis or paresis and injuries. Pigs that were not present at the subsequent visit were recorded and the cause of their removal from the herd noted. At the start of the study, owners were also given a questionnaire which they could fill in their own time and return at any stage during the study. The questionnaire included information on farm management such as:

- Frequency of feeding
- · Feedstuffs commonly used
- Whether improved-breed animals were bought for

- the breeding herd
- Whether the owners sold pigs for profit
- Whether free-range pigs roamed paddocks owned by their owners or roamed other properties

All data were recorded in Microsoft Access (2003) from which they were subsequently extracted for manipulation and analysis in Microsoft Excel (2003) and R (Version 2.3.1). In the analysis, significance was set at the level of p < 0.05.

Table 1 shows the farm, litter and animal-level variables used in all analyses. Descriptive statistics were computed for the following:

- Liveborn piglets per litter
- Pre-weaning losses per litter. Piglets were defined as weaners once they were no longer suckling their mother or (in the case of 2 farms) when the litter was removed from the mother into a separate pen

Table 1: Exposure variables in the study			
Variable	Description	Analysis in which used	
'arm-level variables (all categ	orical)		
Client	0: Non-client of MAF veterinary service 1: Client of MAF veterinary service	All analyses	
Farmingsystem	0: Free range 1: Confined	All analyses	
Frequency of feeding	1: Fedorice a dry or less 2: Feditwice a dry or more	All analyses	
Improved breeds (Pure or cross-breed Duroc and	0: Farmers rarely or never buy in improved breeds for their breeding herd	All analyses	
Landrace) Sell	1: Farmers regularly bry in improved breeds for their breeding hard	AT 1	
	0: Farms are non-commercial; so not sell pigs for profit 1: Farms are sem i-commercial; regularly sell som e pigs for profit	All analyses	
Supplementaryfeeding	0: Pigs rarely or never fed anything other than coconut and other common crops 1: Pigs always supplementary fed with protein sources like fish waste	All analyses	
itter-level variables			
Wearningage	Unit: Days. The last day when piglets in a litter were seen to be suck lingtheir mother or, in the case of 2 farms, the day when the litter was removed from its mother into a separate grower pen	Kaplan-Meier survival, Logistic regression	
Seasona litter was born	0: Dry seas on (June – November) 1: Rainy season (December – May)	Kaplan-Meier survival, Logistic regression	
nimal-level variables	TO DE MINE OF THE OWNER		
Time atrisk (TAR)	Unit: Days, TAR for adults was the time from enrolment in the study to death, skunghter, trade, loss or the end of the study. TAR for piglets was the time from birth to death, skunghter, trade, loss or the end of the study.	Kaplan-Meier survival, Logistic regression	
Canditian score (1 - 5)	1 = Veryskinny and 5 = Fat.	Notused in analysis because it was inconsistently recorded to free-range farms where there were always animals stillout roaming and not present at the time of the visit.	

- Mean number of "useful" piglets per litter: these
 were piglets that survived until weaning and piglets
 that were removed for useful offtake (slaughtered
 for food, ceremonial purposes, sold) before
 weaning.
- Time to death or non-productive loss in unweaned and weaned pigs
- Time to slaughter or sale from birth
- Time to death or non-productive loss in adult pigs during the study

Kaplan-Meier survival analysis was used to measure time from birth to death or non-productive loss in young pigs. Censored observations were animals that were alive at the end of the study or were productive offtake, as sales, food or ceremonial contributions. Failures were animals that died and also, in the case of free-range herds, included animals that did not return to the herd from roaming. All outcome variables were assessed for association with farmlevel exposures. Weaning age and season of birth were also added to the analysis. Significant differences were assessed with log rank tests.

The association between farm management factors and the number of piglets born per sow year was assessed using Poisson analysis. Intraclass correlation at sow and farm level was tested to determine whether the model needed to be adjusted for clustering. The final model used sow as a random effect. Because there was a high correlation between being a client and having a confined system, these two exposures were combined to form one explanatory variable, categorised as follows:

- Client with a confined system (n = 58) was combined with Non-client with a confined system (n = 4), because there were not enough non-clients with confined systems to have this category analysed on its own
- Client with a free range system (n = 32)
- Non-client with a free range system (n = 109)

The association between weaning age, farm management factors and mortality in piglets was explored using logistic regression. Intracluster correlation was calculated for farm, sow and litter to determine the need for clustering adjustment in the model. The logistic model used litter as a random effect and classified weaning age into 4 categories (divided by the quartiles) because the continuous variable did not have a linear relationship with the outcome.

Results

The descriptive statistics for farm size and sow productivity are presented in Table 2. The Kaplan-Meier survival curves for piglets before and after weaning are shown in Figure 1. The overall mean time from birth to death in young pigs in client holdings was 54 days and in non-client holdings was 84 days. The mean time to death in confined systems (35 days) was less than half that in free range young pigs (89 days). Log rank tests showed that preweaning survival was significantly better in non-client herds (p < 0.01) than in non-client herds. They also confirmed the picture shown in Figure 1(a), that preweaning survival was significantly better in free range herds than confined herds (p < 0.01). However, the situation changed after weaning. Confined weaner pigs had better survival than free range weaner pigs although this difference was only marginally significant (p = 0.06). Weaner pigs in client herds had significantly better survival than those in non-client herds (p < 0.01) Weaning age was normally distributed and quite variable, ranging from 19 days to 251 days. The extended suckling period was quite typical of free range pigs, where piglets were not forcibly removed from the sow at a certain age. The mean time from birth to useful offtake in confined pigs (165 days) was longer than in free range pigs (150 days); however, there was no significant difference in time to offtake between confined and free range herds.

There were 137 sows used in the Poisson analysis for piglets per sow year; 13 of these sows did not farrow during the study. The remaining 124 sows produced 190 litters. Table 3 shows rho (r), the intraclass correlation coefficient for farm and sow. Sow was used as a random effect in the final model where the only significant variable was client plus confinement status (Table 3).

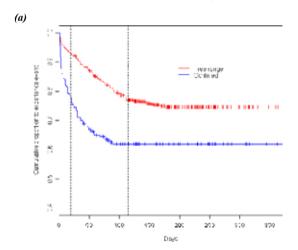
Table 4 shows the results from the final Poisson model. Confined farms were used as the referent in the model; these produced 5.3 piglets per sow year (p = 0.00) whereas Free range non-client farms produced 6.8 piglets per sow year (p < 0.01). Free range client farms did not produce a significantly different number of piglets per sow year from the referent farms (p = 0.32).

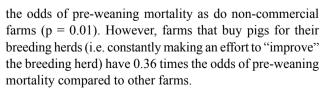
The descriptive statistics for preweaning mortality have been shown in Table 2. Of the 190 litters that were enrolled during the study, 123 (from 97 sows) were followed through to weaning. The other 67 litters were either unweaned at last observation or all died before weaning and therefore could not be included in the logistic analysis. After determining the intraclass correlation for preweaning mortality (see Table 5), litter was used as a random effect in the logistic model (Table 6). Weaning age had no effect on the odds of pre-weaning mortality. The variables 'Buy' and 'Sell' were the only significant ones in the analysis. That is, semi-commercial farms (sell pigs for profit) have more than twice

Table 2: Descriptive statistics for farm and sow productivity

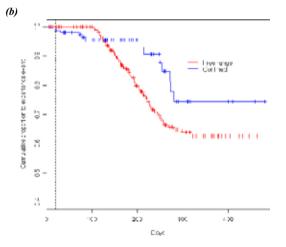
Variable	ш	Mean (95% confi dence lavels)	Median (25th & 75th percentides)	Minimum	Maximum
Overall					
Mean sous perform	137	53		1	9.5
Mean beers per Laun	13	0.4		(2.2
Livebora piglers	1137	5.4 (5.0, 5.7)		0	13
Useful per latter	586	1.8 (4.4, 5.2)		Ç	11
Freewaring losses	154		1 (0, 2)	0	3
Wesners per litter	470		4 (2, 5)	0	11
Clients					
Mean saws per farm	66	5.8		1	9.5
Mean boots per form	13	1		1	2.2
Livehous piglers	424	4.7 (4.1, 5.2)		c	12
Upeffal per latter	210	1.5 (3.8, 1.8)		1	9
Premearing losses	14		0 (0, 2)	0	8
Wesners per litter	182		3 (2,4)	ć .	•
Ivon ellienta					
Mean spos per ferm	71	4.9		2	7.5
Mean boars per firm	D	D		c	0
Levelsom paglets	713	5.9 (5.4, 6.4)		Ç	1.5
Useful per litter	3.76	5.2 (4.7, 5.6)		0	11
Premeating losses	100		1 (0, 2)	0	6
Western per litter	288		4(3, 5)	6	11

Fig 1. Kaplan-Meier survival curves for piglets from birth to weaning (a) and after weaning (b). The vertical dotted lines indicate the minimum (19), mean (114) and maximum (251) weaning age in days.





Discussion



The majority of clients of the Animal Health Service have confined pig holdings. The majority of pig holdings in the country are free range systems. Preweaning survival is better in free range holdings than confined holdings. From our observations, this can be attributed to the following: during heavy rains, there is little or no opportunity for confined pigs to shelter from flooding and rain. Dirt enclosures get muddy and flooded resulting in a large

Table 3: Intracluster correlation (p) for liveborn piglets at farm and sow level

Level of clustering	Number of clusters	P
Faun		
Overall	23	0.13
Clients	10	0.09
Non clients	13	0.02
Non-chard, live range	12	0.0.02
Client, face range	2	0.0.03
Confined	9	0.09
Sew		
Overall	137	0.52
Chenis	56	0.60
Non clients	71	9.41
Non client, free range	99	0.44
Client, time range	21	0.56
Confined.	17	0.51

Table 4: Poisson model for piglets per sow year

Vaible	Coefficient (Standard en- cer)	Piglets per sow year (95% confidence levels)	F
Confined (Intercept)	1.66 (0.02)	5.3 (5.8, 7.1)	0
Non-chent and Free range	0.42 (0.11)	6.8 (6.6, 7.4)	0.0003
Client and Free range	-0.16 (0.16)	6.1 (5.6, 6.3)	0.32

number of mortalities due to drowning and hypothermia. However, in free-range holdings, sows have a better opportunity of sheltering with their litters away from flooding and direct exposure to heavy rain. Infectious disease may also play a role in the lower preweaning survival of confined pigs. There were more reports of disease and death after illness from confined farms than from free-range farms during the study. This is likely due to the ease with which infectious disease would spread amongst confined pigs in close contact with each other; however these more frequent reports may also be due to ease of recognising changes in a confined herd that the owner sees throughout the day versus a free range herd that is out in the bush most of the day and is not seen as frequently. Nutrition is another important factor; pigs in confined holdings are subject to restricted feeding, usually once or twice a day. It was noted, although this information was not used in the analysis, that confined pigs more commonly had lower body condition scores compared to free range pigs that were free to scavenge all day and also, once or twice a day were fed about the same amount of food that confined pigs would get. Undernutrition together with other stress factors may have contributed to preweaning mortalities in these confined holdings.

The marginally better postweaning survival of confined

pigs compared to free range pigs is likely due to the fact that free range weaners are at constant risk of being killed by dogs or by other people or hit by car. Weaners in confined holdings are not subject to this risk and are at an age where they are better able to deal with the factors to which their littermates succumbed before weaning. It is difficult to explain the outcome of the logistic model; there are obviously other factors that are associated with buying and selling pigs that affect preweaning mortality.

On sow productivity, it is clear that free range, non client farms produce more piglets per sow year than free range client holdings and confined holdings. This may largely have to do with nutrition - as mentioned before, low body condition scores were more commonly seen in confined holdings than free range holdings. Free roaming pigs have the opportunity to scavenge throughout the day, in coconut plantations and other crops; they are then also fed by their owners at least once a day. Confined pigs rely on at least once daily feeding by their owners and also have restricted access to water. Only 3 of these owners were seen on our visits to be feeding adequate amounts to their herds. Another thing to note is that despite the fact that many free range sows are not seen with their litters until several days after farrowing, they are still producing more piglets. There are surely some piglet losses between birth and when a litter is first seen

Table 5: Intracluster correlation (ρ) for preweaning mortality at farm, sow and litter level

Level of clustering	Number of clusters	ρ
Farm		
Overall	23	0.07
Clienta	10	0.03
Nonclients	13	0 07
Sow		
Overall	97	0.13
Clients		0.17
Non elients		0.11
Litter		
Overall	123	0.17
Clients	19	0.22
Non elienes	74	0.14
Non elienes	74	0.14

Table 6: Logistic model for preweaning piglet mortality

Variable	Coefficient (Standard auce)	Odda ratio (95% confidence levels)	Р
Intescept	1.78 (0.22)	0.17 (0.11, 0.26)	< 0.01
Sell	0.89 (0.34)	2.43 (1.24, 4.76)	0.01
Buy	-1.01 (0.40)	0.36 (0.17, 0.80)	0.01

but these free-range sows are still more productive overall.

Technical report. Department of Statistics, Apia.

Another conclusion that we can draw from this study is that those pig farms that the Animal Health Service has as clients are the ones with more disease and production problems whereas the non-client farms are either not experiencing disease or not seeing it and are more productive in terms of piglets per sow year.

With this baseline information on backyard pig production, the Ministry of Agriculture can make more informed recommendations to farmers on ways they can improve production and reduce disease. For example, keeping in mind that free range holdings produce more piglets per sow year, which survive weaning better than piglets in confined holdings, but are always subject to predation, theft and accidents, one recommendation may be to remove free range piglets from their mother at a certain age, and start raising them in confinement. We should keep in mind also that adequate nutrition is important for these weaners once they are confined, and advise farmers accordingly so that these weaners remain healthy and in good body condition in confinement.

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Anonymous (2000), 1999 Census of Agriculture report.

The Role of Cetaceans as a Sustainable and Renewable Resource in the Solomon Islands*

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Abstract

Cetaceans have played a major role as a source of animal protein, in rituals, ornaments, source of income and the teeth as a traditional currency by the Baegu, Asifola, Lau, Bita'ama, Walande and Fanalei People of Malaita Island in the Solomon Islands. The practice of dolphin harvesting as a sustainable and renewable resource is still intact and active today.

The greatest challenge and threat faced by these communities is from foreign vocal animal rights, animal liberation and environmental animal groups from developed nations camouflaging under animal welfare. The focus and attention has intensified as dolphin harvesting communities enter into the modern monetary system and trade by training and selling dolphins to foreign dolphinariums. The prospect of this resource is lucrative and if it is developed on sustainable principles, will offer great future for the communities in terms of self-reliance and income generation.

Introduction

Cetaceans are an important sustainable and renewable resource by the coastal communities of Baegu, Asifola and Lau in the North East, Bita'ama in the North, Walande and Fanalei in the south of Malaita Island in the Solomon Islands.

The Bita'ama, Walande and Fanalei communities originated from the Lau, Baegu and Asifola communities and they still retain the traditional practices and the language dialects.

The practice of Cetacean harvesting has been there for centuries and the traditional knowledge has been passed down from generation to generation through songs, poems, lamentations and stories via word of mouth. All these dolphin harvesting communities ethnically are Melanesians and live on artificial Islands which are man-made Islands. These artificial Islands range from a few houses to hundreds of houses.

The artificial Islands are located on the periphery of

the worlds deepest and biggest under water plateau - the Ontong Java Plateau. Surrounding waters here are warm with high salinity and this makes it a perfect incubating environment for marine life breeding. This is where most aquatic mammals in the Pacific breed and coincidently this is where the El Nino effect originates. El Nino is the determinant of the major global weather patterns.

Harvesting

Cetacean harvesting is seasonal and is only done once or twice per year. The cetacean genuses that are mostly harvested are Torsiops, Lagenorhyncus, Cephatorhynchus, Grampus, Phocoena and Stenella.

Traditional emphasis is on careful management and conservation of resources through traditional knowledge. Harvesting during full moon is not encouraged because of the mixed sexes, juveniles, calves and breeders that are in the pods.

Harvesting is usually encouraged during the first or last lunar quarters as you get individual adult sexes in their own pods. Captive breeding has not been successful with many of the species because of the high demand of intensive care and also that there is limited knowledge of the behaviour and feeding patterns of the species. The only species that can be kept for a relatively longer period of time is the Torsiops aduncus (Pacific common dolphin)

Dolphin harvesting is only tasked to males and it involves rigorous discipline and complex traditional rituals prior to actual calling and harvesting. Catches per harvest can range from a minimum of 300 animals to a maximum of 2,000 animals. Annual Harvest catches can range from 1,000 to 3,000 animals and normally coincides with community social events.

The Resources

Animals are harvested for meat (as a source of protein), ornaments and decorations, teeth as part of dowry and traditional currency. Currently one dolphin fetches up

to \$350.00 Solomon dollars (USD 50.00) on the home *Paper presented at the Fourth Pan Commonwealth Veterinary Conference, 4th - 8th November 2007, Barbados West Indies.

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market for meat and teeth. Proceeds are used by villagers to purchase basic necessities as fishing nets, school fees and infrastructure. A percentage of each catch goes to meet community projects such as church buildings, community halls, clinics, water supplies and solar power systems.

With the current global demand for dolphins such as Torisops aduncus (Pacific Common Dolphin) for foreign dolphinariums prices are getting very attractive at SBD 175,000 - 200,000 (USD25,000 to 30,000) per animal.

The Solomon Island Government recognises this resource as a potential export commodity and foreign currency earning for dolphin catching communities. The Government has established an annual export quota of one hundred (100) animals per year. Harvesting and Export Permits can only be held by persons or tribes of dolphin harvesting communities. There is no restriction on traditional harvesting and utilization of this resource but communities are encouraged to maximize income by engaging in this export quota.

Taxes levied on foreign buyers will be channelled by Government to projects in dolphin harvesting communities.

For a quota of 100 dolphins annually at USD 25,000.00 - 30,000.00 per animal would mean a direct injection of USD 2.5 - 3 million (SBD17 - 20 million) into the village communities per year. This will have great impact on infrastructure development, such as schools, hospitals, clinics, water supplies, electricity and would greatly reduce over reliance on the Central Government or foreign donors for aid. This will no doubt improve peoples' lifestyle, standard of living, alleviate poverty and assist in purchase of basic needs.

Sustainability

Sustainability in our traditional context is the amount of catch predicted verses the actual catch. If the predicted catch is equal to or more than the actual catch then the population harvest is sustainable.

In the modern scientific population abundance context, population sustainability will be based on frequency of sightings, calls and head counts. The sustainability will be 5% -10% annual removal of the calculated total population.

Published and non published studies by a number of researchers in the dolphin catching communities have indicated that populations are either stable or increasing. This shows that traditional catching is sustainable.

Scientific studies and surveys of cetacean abundance in the Solomon Island waters are currently in progress with the involvement of some reputable scientists. Genetic typing and gene studies are also in progress.

Preliminary surveys on population abundance in Solomon Island waters indicate a healthy cetacean population of between 300,000 - 800,000 animals. This would put a minimum sustainable harvest rate of 5% at 15,000 animals per year.

This observation supports well the traditional and preliminary scientific observation to date that cetacean harvesting in the dolphin catching communities is sustainable and that the Government's current export quota is very responsible and sustainable.

Politics

Politicians from dolphin catching/ harvesting communities play a crucial role in the Solomon Island Government and the balance of power in the Representative Government rests with them. This has direct bearing on Government decisions. The Deputy Prime Minister, Chairperson of Government Caucus and key Government Ministers in the current Government are representatives of dolphin harvesting communities and their survival in parliament rests with their electorates and voters, the dolphin catchers.

A support for a vote to ban traditional dolphin harvesting and dolphin exports (like the former Minister of Fisheries) is your exit ticket from the Parliament.

Legal/Constitutional Authority

The constitution of Solomon Islands allows indigenous Solomon Islanders, tribes and communities to practice their traditions, beliefs and customs provided that it does not contravene common law. The constitution also allows citizens the utilization of natural resources provided that it is sustainable and under good management and conservation practices.

The United Nations charter in principle supports Freedom from want and Freedom to Religious and Cultural beliefs and practices.

The ICUN (advisory group to CITES) policy statement supports captive breeding and sustainable use of resources.

CITES - Convention in Trade of Endangered Species supports trade in fauna or flora provided that species is not

endangered or protected or the amount removed or harvested is not detrimental to the survival of that species.

Solomon Island is a signatory to this convention. Dolphins harvested in the Solomon Islands are not listed as endangered or protected (except Hectors Dolphins in New Zealand, Irrawaddy dolphins in the Gulf of Mexico) and trade is regulated by legal authorities of the sovereign states of the importing and exporting countries. Solomon Islands have abided by all these national and international laws, treaties and conventions. Quotas issued are very responsible and sustainable.

Threats/Opposition

The biggest threat and opposition to dolphin harvesting communities in Solomon Islands is the Animal rights, Animal liberation, Humane societies and Environmental animal groups from the Developed Nations. These vocal groups have direct links to their Green or Environment Parties within their Government systems. Most are camouflaged under animal welfare. They intensively lobby, issue threats, extort and blackmail our communities and Government. Some of their actions include:

- 1. Campaign for boycotts against our country's tuna products.
- 2. Campaign against tourists and visitors to this country.
- 3. Lobby their Governments to withdraw aid and other financial assistance.
- 4. Write threatening letters to our communities and Fisheries Minister.
- 5. Argue that our traditional practices are inhumane with no respect for animals.
- 6. Oppose dolphin exports to dolphinariums.
- 7. Oppose captive breeding programs.
- 8. Argue that Solomon Islands has violated CITES and International laws.
- 9. Argue that amount harvested and the export quota is detrimental to stocks.

Counter Response/Justification

Our communities response to justify our practise and to challenge these threats from these Animal rights and Animal liberation groups is to question their honesty and consistency and challenge these groups to show facts and fairness in their criticisms:

- Our traditional dolphin harvesting is not at all linked to dolphin deaths, by-catch and drift-net deaths and nor is there a link to the tourism industry. Solomon Island uses pole and line in the tuna industry with a zero by-catch. Therefore, the action of these groups only amounts to black- mail and extortion.
- 2. USA, according to their Congressional Report 96011 explicitly confirms that the US Tuna Industry kills 65,000 dolphins per year as by-catch. The allowable by-catch by the US Government Fisheries Department is 5,000 animals per annum. USA still allows the indigenous Alaskan Eskimos to practice their traditional rights to Harvest whales, cetaceans and seals of which some are on the CITES Endangered List.

Why do American Animal Rights groups target the Solomon Island dolphin harvesting communities and the Solomon Island Government and turn a blind eye on their own backyard?

- 3. Canada allows between 250,000 500,000 seals to be killed each year. It also allows its indigenous people to harvest whales and cetaceans.
- 4. Japanese kills between 30,000 40,000 dolphins as by-catch in its tuna Industry and between 5,000 10,000 in its traditional dolphin drive (Hagi dolphin drive) and a few thousand whales each year.
- Scandinavian Countries kills hundreds of whales each year.
- Koreans and Taiwanese fishing boats also kill thousands of cetaceans as by-catch in their tuna Industry each year.
- Australia allows the indigenous Aboriginal and Torres Straight Islanders to harvest dugongs each year in the name of tradition. - A class 1 protected species under CITES.
- New Zealand through its fisheries harvesting in North Island has depleted Hectors dolphin numbers to less than 100 and is now declared endangered.
- 9. Mexico through its driftnet fisheries has depleted its Irrawaddy dolphin/porpoise stock to a level of 200 300 and is now considered as endangered.
- 10. Based on these statistics we challenge these animal rights group why we are targeted when our practices are sustainable and why their countries unsustainable dolphin practices and detrimental fisheries by-catch figures are not condemned.

11. If these foreign opposition groups want dolphin harvesting communities to stop these practices, why don't they come up with some sustainable alternatives and provide funds for them.

Conclusion

All these facts and statistics clearly show the inconsistency, the biased nature, the unfair treatment, lack of respect and sensitivity for traditional practices in developing countries, and the hidden agenda by a lot of these animal rights and liberation groups camouflaging under animal welfare. Dolphin harvesting communities with their cultural practices and their development aspirations cannot be continuously held at ransom by these extremist groups.

Cetaceans have played an important role as a sustainable and renewable resource for centuries and will continue to do so in these communities on Malaita in the Solomon Islands. Extremist animal groups need to be sensitive and to show respect for the cultural values of other people and they cannot continually put human sentiments into animals and sensationalise issues and to impose them on people in the developing countries.

We have a God given resource to utilise and harvest provided that it is done responsibly, sustainably and under good management and conservation practices. We do not want to be spoon-fed with aid from foreign donor nations and from our Central Government. This renewable resource can make a lot of difference to peoples' standard of living and general infrastructure in the village communities with a promising future if managed properly.



Response of horses offered a choice between stables containing single or multiple forages

To investigate the choices of foraging location of horses. 10-12 horses were introduced for five minutes into each of two similar stables containing single forage or six forages, in four replicated trials. The horses were then removed and released into the gangway between the stables, and allowed five minutes to choose between the stables their initial and final choices, mean duration in each stable and proportional frequency of change of location were compared. Most of the horses initially entered the closest stable on release (P<0.05); if closest stable contained a single hay, most horses transferred to the stable containing multiple forages in multiple locations(P<0.001). The length of time spent by the horses in the two stables suggested that they preferred multiple forages in multiple locations (P<0.001) Eleven horses moved from one stable to the other on one or more occasions during trials when hay or a preferred forage was available in both stables, possibly indicating a motivation to move between foraging locations regardless of the palatability of the forages offered or the horses preference for a forage.

D. Godwin, H.P.B. Davidson, P. Harris (2007). *The Veterinary Record*, Vol.**160**(16). April 21, 2007.

Gall bladder torsion and rupture in a dog

A 6-year-old desexed female German Shepherd dog was referred to the Murdoch University Veterinary Hospital for assessment and management of acute onset vomiting, diarrhoea, polydipsia and lethargy of 2 days duration. Surgical, microbiological and histological findings were consistent with necrotising cholecystitis secondary to gall bladder torsion, resulting in gall bladder rupture and secondary non-septic bile peritonitis. A chronic peritoneopleural perforation resulting from an abdominal cavity foreign body and congenital peritoneopericardial hernia were also present. The dog made a full recovery following cholecystectomy, foreign body removal, repair of the peritoneopleural perforation and pertoneopericardial herniorrhaphy. This is the first recorded case of gall bladder torsion in the dog.

G.S. Corfield, R.A. Read, P.K. Nicholls and N. Lester (2007). *The Australian Veterinary Journal*, Vol.85(6). June, 2007.

Letter to the Editor

The Editor,
Journal of the Commonwealth Veterinary Association.

Dear Sir,

You kindly printed an article called "Veterinary Contributions to Papua New Guinea" in the July 2007 Journal of the Commonwealth Veterinary Association, Vol.23 No.2 P.40.

The authors each had a long association within PNG - from 1959 to 2000 for myself. Dr Mike Nunn was a senior veterinarian with the Government for fourteen years, mostly in Port Moresby; and Dr Sandi Jephcott was a field veterinarian on the other side of the country, near Lae. However we have received additional information of veterinary work in PNG which we failed to mention in our article, and for which we offer our apologies to those who were omitted.

This additional information includes -under Early Veterinarians - the first woman to graduate from the Sydney University veterinary school, Pat Abbot, worked in the Kila Laboratory for a few years from about 1958. Her husband, Terry, was Deputy Director of Health in TPNG.

Russell Riek was the only graduate from the Queensland University Veterinary School in 1943, before the School was closed during the war, not to fully reopen until 1951. In the mid - 1950s he was DVO Lae for a term (21 months). He later joined Merck Sharp & Dolme, but was best known as a cattle parasitologist at CSIRO in Brisbane where he did valuable work on cattle ticks.

Julian Best, a Cambridge graduate, was DVO Rabaul, after Don Glasgow moved to Erap in 1960.

Helge Grant-Frost was briefly in Lae with Terry Rothwell.

Brian Goulden succeeded Patrick Harvey as DVO for the Highlands, based in Goroka about 1976.

Phil Redman worked in TPNG briefly and was the first veterinarian to visit the cattle properties in the Milne Bay area. Two of those who owned cattle there became well known PNG politicians, Sir John Guise who was Speaker of the House and later Governor-General; and Dennis Young who was also Speaker and then Minister for Agriculture in his parliamentary career.

It is also of interest that in 1946 the 1 AUSTRALIAN MOBILE SURVEY UNIT was formed to carry out a survey of animal diseases in the Territories. In the report of this survey attention was drawn to the fact that, although the survey was extensive, the diseases reported are not necessarily the only ones present. There were only about 4000 cattle in TPNG post war. Most of the intestinal worms noted came from Australia, except for Mecistocirrus digitatis (von Linstow 1906) found in the abomasum of one cow at Wau on autopsy. No doubt they found more diseases in pigs than cattle, and malnutrition the major source of ill-thrift.

In later years additions to the section on Consultants and volunteers include Dr David Paxton, who was the Australian Team Leader of the Australian Quarantine Support Project 1995-2000, which directed AusAid funds to many of the consultants and veterinary research projects in PNG. AQIS veterinarians, including Matthew Ball, Andrew Moss and Pat Boland are increasingly working in PNG under the North Australia Quarantine Strategy in relation to Avian influenza preparations.

Professor Rick Speare, currently on staff at the medical faculty at James Cook University, Townsville, spent a period working as a veterinarian in Papua New Guinea in the 70's.

Howard Jeffreys, a NSW Department of Agriculture veterinarian, developed an interest in computers and specialised in this work. He worked in PNG in the late 1990s in the financial area.

Alistair Henderson has been doing some consulting for Ramu Sugar Ltd cattle operation in recent years.

It would be appreciated if you could find space for this letter, in your next edition, to complete the article on "Veterinary Contributions to Papua New Guinea". We also apologise to any other veterinarians that have contributed to the development of the PNG livestock industries and the health and welfare of other animals and have not been mentioned in the original article or this current update.

> Yours sincerely, Dr Barbara Jephcott

It is the confession, not the priest, that gives us absolution.

Book & Journal Programme

The CVA Book Programme is coordinated from the Ontario Veterinary

A depot is also maintained in Wodonga, Vic Australia by Dr. Jeff Cave, Regional Representative, Australia / Oceania

Pathobiology Ontario Veterinary College, University of Guelph, Guelph, Ontario, Canada N1G 2W1. E-mail: jderbysh@uoguelph.ca





The CVA Book Programme is coordinated from the Ontario Veterinary College at the University of Guelph by Dr. Brian Derbyshire, assisted by Mr. Jim Brett, the College Librarian, and by Dr. Jeff Cave in Australia. Books are donated by veterinarians in Canada, Australia and New Zealand. They are available for distribution free of charge to graduate veterinarians, but not veterinary students, in CVA member countries in good standing. Priority is given to requests from institutional libraries, such as veterinary schools and veterinary associations, and requests from individuals are met as funds permit. Because of budgetary constraints and increasing mailing costs, the number of books which can be shipped is normally restricted to up to 30 titles for institutions, and up to 5 titles for individual veterinarians in any one year. Individual veterinarians are encouraged to share their books with colleagues in their area if possible.

Requests for books should indicate the required subject areas and/or preferred titles where possible, and they should include the mailing address to which the books should be sent. The latter should be abbreviated as much as possible in order that it may be accommodated in the limited space provided on the customs declaration. It is suggested that those wishing to submit a request should first obtain a copy of the current inventories of books available by contacting, preferably by e-mail, either Dr. Derbyshire or Dr. Cave (see above for contact information). Shipments are made by surface mail, and may take several months to reach their destination. The recipients are requested to acknowledge the safe arrival of the books.

During the period July 2006 - June 2007, 148 books were sent from Guelph to 7 Commonwealth countries as follows: Nigeria (61 books), Uganda (40 books), Guyana (29 books), Kenya (3 books), Trinidad & Tobago (7 books), India (6 books) and Tanzania (2 books). From Australia,

166 books were sent to 7 countries as follows: Nigeria (48 books), East Timor (37 books), Fiji (33 books), Sri Lanka (30 books), Samoa (8 books), Barbados (5 books) and St. Vincent (5 books).

The current inventory at Guelph comprises over 400 titles, and the Australian depot, including sub-depots in New Zealand, Western Australia and Tasmania holds close to 350 titles. Multiple copies of many titles are held. Most of the books were published during the last 20 years; older texts, for which more recent editions are available, are discarded each year. While most areas of veterinary medicine are covered, particularly by the Australian depot, the increasing emphasis on companion animal medicine and surgery in Canada has led to a preponderance of titles in these areas in the Guelph depot, and fewer titles in large animal medicine and surgery, and in public health. The stock of books at Guelph was recently replenished through the cooperation of the Ontario Veterinary Medical Association by their generous collection of donated books at their annual conference.

1 January 2008

J.B. DERBYSHIRE Coordinator **CVA Book Programme**

Physically there is nothing to distinguish human society from the farm-yard except that children are more troublesome and costly than chickens and women are not so completely enslaved as farm stock.

~ George Bernard Shaw

CVA Study Fund

The Fund

This fund has been established by the Commonwealth Veterinary Association (CVA) in conjunction with the Commonwealth Foundation to honour the contributions made by Mr. John Anderson and Dr. L.P.E. Choquette in establishing and promoting the activities of the Commonwealth Veterinary Association.

Financial support to match the funds contributed by the Commonwealth Veterinary Association and the several national and local veterinary associations throughout the Commonwealth may be provided by the Commonwealth Foundation.

1. Purpose

Its purpose is to provide financial assistance to:

- Veterinarians who are members in good standing of their respective national associations to undertake short term study visits to schools, institutions or to undertake short term study courses in veterinary medicine, animal production or related areas in other Commonwealth countries.
- Animal Health Assistants recommended by the appropriate CVA Council Member and Regional Representative, to undergo further short-term training at a school or institution in another Commonwealth country.
 - It is expected that such visits will promote professional and para-professional contacts and provide grantees with new knowledge and expertise in their respective fields of interest. Study proposals which will directly benefit the rural poor and disadvantaged will receive sympathetic consideration. All proposals will be expected to describe how they will benefit the home institution, veterinary organization and community. The visit is also expected to result in a broadening of cultural experience and horizons and to promote Commonwealth understanding.

2. Guidelines

- Grants will be limited to persons with field experience and not holding senior positions.
- The awards are not normally available for University academic or research staff.
- 3. Preference will be given to related regions with 'south-south' movements being encouraged. In exceptional cases, visits to institutions outside the regions qualifying under south-south arrangement will be considered as long as the cost of the visit does not exceed the allocated fund award (Aus \$ 3000). In exceptional circumstances and where approved by the President grantees may receive training in a non-Commonwealth country within that Region.
- 4. The study period should be preferably between 2-3 weeks.
- Awards will normally be distributed equally amongst Regions, however, on occasion, the President may authorize additional awards to a particular Region in any one year.
- 6. The study visits will be financed at a maximum of Aus \$ 3000 including a prepaid air ticket for the least expensive and most direct route.

- Grants are provided only for periods of concentrated study or training on a particular topic or activity and cannot be made for attendance at conferences, meetings etc., nor to underwrite a tour of visits to a number of institutions.
- 8. A report must be submitted to the Secretary CVA within three months of the completion of the study visit. At the completion of the study visit, the participant must receive a letter of release, which should clearly indicate duration of stay, and satisfactory completion of course. The letter should also confirm that at the time of departure, the participants have not left any debts unsettled. This requirement must be conveyed by the Regional Representative or Programme Director to the host institution before arrival of participant.
- It will be necessary for the host institution to agree to assist in arranging suitable accommodation etc. affordable by the applicant.
- 10. Grantees will be expected to give one or two lectures at the host institution or veterinary association on aspects of animal health and production activities in their home country. These lectures should emphasize how their studies in the host country will benefit the rural poor and disadvantaged as well as their impact upon the environment.
- 11. These lectures and the discussions of topics, both professional and social, with the staff of the host institution or veterinary association will serve to further the aims and objectives of the Commonwealth Veterinary Association.

3. Applications

- There is a set Study Application Form/Application. Forms are available from the CVA Secretary, or through the CVA Website.
- Applications should be submitted to the appropriate Regional Representative for processing, at least 6 months prior to the proposal visit.
- iii) The applicants should provide the following:
- A complete curriculum vitae to the Regional Representative
- b) Two passport size photographs
- A letter of acceptance from the person who will supervise the study program in the host country
- Evidence that the study has the support of his/her home institution or national association

4. Administration

- The Study Application Form with supporting documents must be sent to the appropriate Regional Representative
- The Regional Representative will review the application and make a recommendation to the Secretary, CVA.
- The Secretary, CVA will make a recommendation to the CVA President, who will make the final decision.
- iv) The Secretary, CVA will then inform the Regional Representative who will inform the candidate.

Last date of submission of request to Council Members/Reg. Rep. is 30th Oct. 2008. RRs to submit their recommendations before 30th Nov. 2008 to the Secretary, CVA.

Asia

First Lady Director General of the Department of Animal Production and Health. Sri Lanka

Dr (Mrs) HMSP Herath, former CVA Councilor, Sri Lanka and Regional Representative, Asian Region has been selected as Director General of the Department of Animal Production and Health, Sri Lanka. She is the first lady veterinarian in the country to occupy this coveted post.



Mrs. Herath graduated with a BVSc degree from the University of Ceylon in 1975 and obtained her post graduate degree, MSc. (Sri Lanka) 1981 and FRVC (Sweden) 1987. She has specialized in Animal Reproduction.

She has served the Veterinary profession being elected member of the Veterinary Council of Sri Lanka for several years and was the first lady President of VCSL in 1993. She was a member of the Editorial Board of the Sri Lanka Veterinary Journal from 1990 to 1998. She served in the Executive Committee of the Alumni Association of University of Peradeniya, Sri Lanka as an assistant secretary for the year 2003 and as a member of a special committee of Art Gallery and Museum project of the Alumni Association.

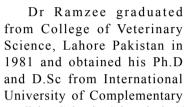
She has served as Director, Animal Breeding for 4 years in the Department of Animal Production and Health until she assumed duties as the Director General of the Department of Animal Production and Health in November 2007.

Indian Veterinary Association

The 28th Indian Veterinary Association Conference and General Body Meeting and a National Seminar on "Role of Animal Husbandry Sector - Vision 2020", organised by Bihar Veterinary Association is scheduled to be held at Patna, Bihar on 8th to 10th February 2008.

New RR Asia

Dr A.A. Ramzee, CVA Councillor, Pakistan has been elected as the Regional Representative, CVA Asian Region. He succeeds Mrs. Herath, Sri Lanka.





Medicine, Colombo, Sri Lanka in 1998 and 2002 respectively. He is a very experienced veterinarian in the field of poultry and has held many offices such as Technical Advisor Dawn Poultry Feeds, Karachi, Technical Manager, Animal Health and Cure, Regional Manager K&N's Poultry Breeding Farms, Lahore and Director Ansari Associates and at present is the General Manager of UM Enterprises.

He has been very active in Pakistan Veterinary Medical Association as a member and later on as the Treasurer and Joint Secretary, and General Secretary of the PVA. He has participated in many International meetings and conferences. He has over 15 years of experience with the CVA and has organised many national and international conferences, the latest being the 14th Asian Regional Meeting at Lahore, Pakistan in September 2005.

World Rabies Day Celebrated

Rabies kills nearly 35,000 people every year in the Indian sub-continent despite being entirely preventable through prompt medical treatment and vaccination. In order to control this dreaded disease, Alliance for Rabies Control, a charity formed in 2006 by a group of researchers and professionals, initiated an awareness programme by designating 8th September as World Rabies Day. In Pakistan, India and Bangladesh, numerous events were held on that day to bring about rabies awareness among the people. Some of the highlights were student marathons, free anti-rabies vaccination camps, etc.

Australasia Oceania

New Roles at VetLearn

After nearly nine years leading the VetLearn team, Mr. Warren Webber has been appointed as the Director of Events.

Mr. Webber has presided over a period of significant growth in the activities and capabilities of the organisation since beginning as CEO in early 1999. Then known as the Foundation for Continuing



Education of the NZVA, and later re-branded as VetLearn®, it has grown from a staff of three to the current nine, from annual revenue of \$776,000 to a peak of @2.3 million in 2005 and with more than a 60% increase in asset base.

VetScript, October 2007

World Small Animal Veterinary Association (WSAVA)

The WSAVA Congress held at Sydney, Australia in August 2007 was a grand success with 2303 delegates from over 55 countries and 956 industry representative participating. Drs. Diane Sheehan, Roger Clarke, Matthew Retchford, Jill Maddison, David Church, Liz Walker and Kersti Seksel were the stewards of an event which has been 8-years in the making.

Aus Vet Journal, Vol.85 No.11 November 2007

Obituary

Dr. Fatimah Nachiar Iskandar, the newly appointed CVA Councillor of Malaysia passed away in August 2007. She was the President of the Veterinary Association of Malaysia and Deputy Dean (Academic & Student Affairs), Faculty of Veterinary Medicine Universiti Putra Malaysia at the time of her death.

New CVA Councillor of Malaysia

Dr. S. Vellayan, Consultant, Zoo, Exotic and Wildlife Veterinarian has been appointed as the new CVA Councillor of Malaysia

Canada Caribbean

New RR Canada Caribbean Region

Dr. Keith Campbell, CVA Councillor, Canada and Past President, Canadian Veterinary Medical Association has been elected as the Regional Representative, Canada Caribbean Region.



Dr. Campbell graduated from the Western College of Veterinary Medicine in 1976, He established

the Dakota Veterinary Hospital in Winnipeg in 1978.

A native of Morden, Manitoba, Dr. Campbell was President of the Manitoba Veterinary Medical Association (MVMA) from 1982-1983. He also served on the CVMA's Practice Committee from 1986-1988, and has represented Manitoba on CVMA Council from 1997.

He was a member of CVMA's Animal Welfare Committee from 1997-2001, during which he was the first representative to take part in the American Veterinary Medical Association's Animal Welfare Committee meetings. In conjunction with his duties on the CVMA Animal Welfare Committee, he also went to Newfoundland and the Magdalene Islands to observe the seal hunt.

Canadian Veterinarian Becomes New Vice President of AAHA

The American Animal Hospital Association (AAHA) introduced its 2007-2008 Board of Directors at the Annual Conference held in Denver, Colorado, in March 2007. John Tait, DVM, is AAHA's new Vice President. Dr. Tait came into veterinary medicine with a background in business. He received his Certified Financial Planner degree from the Canadian



Institute of Financial Planning at the University of Toronto and has an MBA from McMaster University in Ontario. He is managing partner of the Ontario Veterinary Group in Toronto and serves as a part-time assistant professor and externship coordinator for the Ontario Veterinary College

CVA REGIONAL NEWS

Department of Clinical Studies. Dr. Tait received his DVM from the University of Guelph.

Dr. Tait previously wrote the Veterinary Practice Management column for The Canadian Veterinary Journal.

CVJ Vol.48 July 2007

Veterinarians Without Borders -Canada Announces New Support and New Programs

In 2007, which marks the second year of its existence, Veterinarians Without Borders-Canada has received a strong vote of confidence from two major supporters: Aeroplan and the Canadian Food Inspection Agency (CFIA).



The CFIA, through the Office of the Chief Veterinarian, Dr Brian Evans, is providing substantial core funding that will enable VWB to build veterinary capacity, both in Canada and internationally, to prevent the spread of animal and zoonotic diseases. Dr. Evans has promoted the vision that to be health-minded Canadians in globalised world, we must become responsible global citizens. Until the support from the CFIA came through, VWB relied entirely on many long hours of unpaid volunteer time, and the generosity of individual donors and partners who shared its vision. The money from the CFIA has allowed VWB to hire some staff, build basic organisational infrastructure, and free up the time of professional volunteers to develop strategic programs that bring together global needs with Canadian resources.

CVJ Vol.48 July 2007

ECS Africa

President and Vice President, SAVA

Dr Clive Marwick and Dr Anthea Flemming have been elected as the President and Vice President respectively of the South African Veterinary Association. This is the first time in the 103 years of history of the association that a woman has been appointed as the Vice President.



Vet News, July 2007

Obituary

Prof JSJ Odendaal, the newly appointed CVA Councillor for South Africa passed away before assuming office. He was research professor of the faculty of health science Tshwane University of Technology. Prof Odendaal was a highly respected scientist in Companion Animal Behaviour and Ethology. Graduating in 1967



with a BSc and obtaining his BVSc 1971 and PhD in 1999, Prof Odendaal after a brief companion animal practice was appointed as Professor in Companion Animal ZooTechnology at the Faculty of Veterinary Science, University of Pretoria and later on as Professor and Head, Department of Veterinary Ethology which was internationally recognised as Centre of Excellence. He had published 10 books and over 100 scientific articles.

Just before his death Prof Odendaal was appointed as Guest Professor at the Czeck University in Prague and invited to contribute a chapter for a new textbook in veterinary medicine published by the Instituto Zooprofilattico Sperimentale, Perugia, Italy on Animal Welfare.

The untimely passing away of Prof Odendaal is a great loss not only to the CVA but to the entire veterinary community in general and animal welfare in particular.

West Africa

New RR West Africa

Dr Olatunji Nasir, CVA Councillor, Nigeria has been elected as the Regional Representative, CVA West African Region.

Dr. Nasir obtained his bachelors degree from the University of Ibadan with a DVM in 1989 and a masters degree in Surgery in 1997.



He was the General Secretary of Nigerian Veterinary Medical Association (NVMA), Lagos State 1995-2001 and also has held various positions in the NVMA as Editor -in-Chief of the Vet Surgeon, 1987, the Vet Speculum, 1988 and Editor of You and Your Pet, 1993-2001

He was the Head, Technical Committee Veterinary Clinicians Forum (VCF) from 1996-2002 and National Secretary of the NVMA from 2001-2005 and Vice President from 2005 till date. He is also the Chairman, Editorial Board of the Nigerian Vet Journal 2005 till date. He is the Chief Operating Officer and Veterinary Director of Truthmiles Animal Hospital.

He has published number of articles on pets in various journals and magazines.

UK Mediterranean

New BVA President

Dr. Nick Blayney has been elected as the new President of British Veterinary Association.

Dr. Nick Blayney qualified from Liverpool in 1980 and has been in full time practice ever since. He spent a decade working in Herefordshire, in mainly farm and equine work and then



bought a practice in Warwickshire of which he is still the principal.

Dr. Blayney has been involved in BVA affairs for nearly twenty years, from being a member of Midland Counties Veterinary Association, to secretary of Warwickshire Veterinary Club, in which role he brought the club to membership of BVA Council. He has served as their representative on Council for many years. He has also served on the Council of the Society of Practising Veterinary Surgeons and as their Honorary Secretary 2001 to 2004.

He was Chairman of BVA's Members' Services Group until October 2006 and became BVA President-Elect in October 2006 and BVA President in September 2007.

BVA Officer Team



The BVA Officer Team for 2007/08 was elected at the Association's

AGM on 30th September 2007.

The new President Mr Nick Blayney, is pictured with President-Elect

Mrs Nicky Paull and Past President Mr David Catlow

CALENDAR OF EVENTS

2008

15th CVA Asian Regional Meeting, Conference and Workshop on Concepts in Animal Welfare, Theme: *Challenges facing the Veterinary Profession: Adaptation and Preparedness*, Bangalore,

India. 22-24 February.

CVA Regional Meeting of UK Mediterranean Region, Malta. (Date to be announced).

20th International Pig Veterinary Society Congress, Durban, South Africa. 26 June.

29th World Veterinary Congress, Vancouver, Canada. 27-31 July.

The 15th Congress of The Federation of Asian Veterinary Associations (FAVA) Bangkok, Thailand **27-29 October**.

The 25th Biennial Conference of the Caribbean Veterinary Medical Association, St Maarten, West Indies. **6-9 November**.

World Congress of Veterinary Dermatology, Hong Kong. 19-22, November.

CVA Regional Meeting of Australasia/Oceania Region, Apia, Samoa. **November** (Date to be announced)

2009

CVA Regional Meeting of ECS African Region, Kampala, Uganda. (Date to be announced)

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