### Regional Representatives

<table>
<thead>
<tr>
<th>Region</th>
<th>Representative</th>
<th>Address Details</th>
</tr>
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<tbody>
<tr>
<td>ASIA</td>
<td>Dr. D.D. Wanasinghe</td>
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</tr>
<tr>
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<td>CANADA CARIBBEAN</td>
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<td></td>
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</tr>
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<td></td>
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Dr. S. Abdul Rahman  
Editor  
COMMONWEALTH VETERINARY ASSOCIATION NEWS  
123, 7th B Main Road, IV Block (West), Jayanagar, Bangalore 560 011 INDIA Tel 0812 641200  
Published twice a year by the Commonwealth Veterinary Association
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EDITORIAL

Thank you! Reports on the new edition of CVA News, January issue, are trickling in, as and when it is reaching its various destinations. Response from the readers has been of appreciation and I would like to thank them for the confidence they have in me as the new editor of CVA News.

There have been many lacunae and one of the most serious one is the delay in the receipt of the CVA News at various centres. The magazine was sent by surface mail at the end of January and has reached U.K. in April and reached Canada & Australia in May. Details about the receipt in other countries is still not known. The delay in surface mail has led us to shift our printing of the CVA News from Bangalore, India to Kent, U.K. edited material will be sent to U.K., where it will be printed bound and posted. It is hoped that with this new arrangement the future editions of CVA News reaches its readers earlier than before.

I had mentioned it before, and I would like to do so again, that news from the various regions is still not enough. Without such news, the magazine becomes incomplete. I once again request the readers to send information on various items of interest for publication.

The most important event in the history of the Commonwealth Veterinary Assn. will be the Pan Commonwealth Veterinary Conference at Harare September 10th 1990. We are all hoping for a big turnout. I look forward to meeting you there.

S. Abdul Rahman
Editor
The Commonwealth Day Message, 12 March 1990, from Her Majesty The Queen, Head of the Commonwealth, referred to the fact that within the Commonwealth family, relationships are not limited to contacts between political leaders but that every national organisation and profession has its Commonwealth counterparts. The Commonwealth Veterinary Association is such an organisation providing a link between people with common or related interests.

Unfortunately during the 22 years in which this Association has been in existence it has not been possible to organise a meeting for all members throughout the Commonwealth. This matter has now been rectified and for the first time the whole Commonwealth veterinary family will meet together in Harare, Zimbabwe in September 1990.

We shall be renewing old acquaintances, meeting many new friends, discussing, arguing and perhaps even falling out a little as befits a healthy, vibrant family but essentially all meeting together to cement our friendship.

We are assured of an excellent welcome from our hosts in Zimbabwe where hospitality is second to none.

The gathering is not restricted to “the family” because as with all large families “friends of the family” are assured of a warm welcome. The gathering is open to all who wish to attend from within or outside the Commonwealth.

Come one come all, everyone welcome.

Looking forward to seeing you in Harare.

J T Blackburn
President
Commonwealth Veterinary Association

June 1990
Commonwealth Day Message 1990

From
Her Majesty The Queen
Head of the Commonwealth

Every year, when we celebrate Commonwealth Day, it reminds me that we are celebrating something which is quite unique. Nothing quite like the Commonwealth has ever been created or evolved before. Its comparative lack of rules, its human richness and its geographical diversity, make the Commonwealth as hard to define as it is easy to criticise.

The members of any family, and that is what the Commonwealth most nearly resembles, will vary widely in age, appearance, tastes, talents and temperament. From time to time they will hold some very different opinions. Yet members of a family have no difficulty in recognising each other as relations, and in putting a value upon their kinship. They are able to sum one another up with both realism and affection. They appreciate each other's special qualities. Above all, they have learned to feel at home with each other. So have we in the Commonwealth.

It is a feature of our association that we learn from each other and influence each other, but do not expect to agree on everything all the time. In the last resort, there is no compulsion to conform. If we are sometimes critical of each other, or disappointed, it is because we expect more of members of our family than we do of others. Now and then a member may even feel constrained to go off on his own.

Some years ago this happened to Pakistan for example. Yet today we have the joy of having Pakistan back in the family. This illustrates perfectly the nature of the underlying bond which distinguishes the Commonwealth from all other international organisations.

The Commonwealth has other strengths too. One of them is that it appeals to the young as much as to the old, to peoples and nations at all phases of political, economic, cultural and social development, to reformers and lovers of tradition alike.

Another strength of the Commonwealth is the multiplicity of strands that bind us together. We should remember that the Commonwealth relationship is not limited to the contacts between political leaders. Each and every national organisation and profession seems to have its Commonwealth counterpart. They give it life and diversity and map out the paths of its future achievements.

On Commonwealth Day especially we greet each other as members of the biggest and most unusual family on earth.

12th March, 1990

ELIZABETH R.
JOURNALS, BOOK AND AUDIO-VISUAL PROGRAMME

Books donated to Countries under the Commonwealth Veterinary Association Journal/Book/Audio-Visual Program


Western Samoa

1. Physiology of Domestic Animals/ Dukes/70
2. *Atlas of Descriptive Histology/ Reith & Ross/70
3. *Canine Orthopedics and Treatment of Fractures/Perrumatt/72
4. *Diagnostic Procedures in Veterinary Microbiology/Carter/73
5. *Small Animal Dermatology/ Muller *Kirk/76
6. *Small Animal Fractures/Brinker/75
8. *Veterinary Hematology/Schalm, Jain & Carroll/75
9. *Veterinary Obstetrics and Genital Disease/Roberts/71

available from Yorkton, Sask

Sri Lanka

1. Canine and Feline Behavioral Therapy
2. Handbook on Animal Diseases in the Tropics
4. Sheep Health Handbook
5. Field Manual for the Investigation and Diagnosis of Exotic Protozoan Diseases and Anaplasmosis in Canada
6. Anatomy and Physiology of Farm Animals
7. Clinical Endocrinology of Companion Animals
8. Clinical Syndromes in Veterinary Neurology
10. BVA Handbook on Tropical Diseases
13. Small Animal Clinical Nutrition
14. Veterinary Obstetrics
15. Canine and Feline Urology
16. AHD National Health Program, Ag Can 1986
17. APD Overview 1986
18. Veterinary Med. 4th Ed. 1974****
19. Evaluation of Bulls for Breeding Soundness
20. UFAW Care and Management of Laboratory Animals, 5th Edition
22. The Biology and Medicine of Rabbits and Rodents
23. Rowett Research Institute Report
25. Special Veterinary Pathology/Thomson
28. Immunology for Students of Medicine/Humphry White 1970
30. Primer of Epidemiology/Freidman 1974

India

1. Goat Health Handbook
2. Sheep Health Handbook
3. Eval Bulls for Breeding Soundness
4. Carlson’s Vet Radiology/Gillette, Thrall & Libel/77
5. Radiology in Vet Orthopedics/Morgan
6. Vet Radiological Interpretation/Douglas & Williamson

Malawi

1. Goat Health Handbook
2. Sheep Health Handbook
3. Eval Bulls etc.
5. APD Overview 1986
7. Veterinary Med. 3rd Ed. 1968****
8. Bovine Med and Surgery 80
9. Vet Immunol/Herbert ’74
10. Animal Health & Housing/Sainsbury
11. Pathology of Lab Animals/Rebelin & McCoy
12. Diseases Transmitted From Animals To Man/Hull
13. Experimental Surgery/Markowitz et al.
14. Flies and Disease/Greenberg Vol 1 & 2
15. Poultry Health Manual/Turkey Health Manual/Poultry Diseases/ Various sources
17. Difco Manual
18. Histology/Hamm
19. Vet. Helminthology & Entomology/Monnig’s
21. Handbook/Tropical Diseases/ BVA
22. Memoirs/Kleineberger-Nobel
23. Improvement of Livestock/Bogart

Tanzania
1. Goat Health Handbook
2. Sheep Health Handbook
4. Eval Bulls etc.
5. AHD Nat. An. Hlth, Program 1986
6. APD Overview 1986
7. Path of Domestic Animals, Vol 1 & 2, 1963****
12. Idem, 1986
15. Idem; Necropsy Techniques Mar. 86
16. Idem; Anesthesia Nov. 86
17. Idem; Parasites-Epiderm & Control July 86
18. Idem; Bov Neurological Dis Mar 87
20. Vet Med & Human Hlth; Schwabe 1959
22. Vet Clin Diag; Kelly 1967
23. Cell Pathol; Cheville 1976
24. Clin Diag of Dis of Large Animals; Gibbons 1966
25. Diseases of Feedlot Cattle; Jensen 1965
26. Vet. Toxicology; Radeff 1970
27. Difco Manual; 9th edn.
28. Diseases of Poultry; Blest & Schwartz 1967
29. Lameness in Horses; Adams, 1963
30. Duke’s Physiology, 8thed.
31. Pathol of Domestic Animals, vol. 1 & 2, Jubb & Kennedy
32. Orthopedic Surgery of the Dog and Cat/Leonard
33. Some Diseases of Animals Communicable To Man/Graham-Jones
34. The UFAW Handbook/The Care and Management of Lab Animals

Kenya
1. Goat Health Handbook
2. Sheep Health Handbook
3. Eval of Bulls etc.
4. AHD report
5. APD Overview

Malaysia
1. Goat Health Handbook
2. Sheep Health Handbook
3. Eval of Bulls etc.
4. AHD report
5. APD Overview

Fiji
1. Goat Health Handbook
2. Sheep Health Handbook
3. Eval of Bulls etc.
4. AHD report
5. APD Overview

Mauritius
1. Goat Health Handbook
2. Sheep Health Handbook
3. Eval of Bulls etc.
4. AHD report
5. APD Overview

Papua-New Guinea
1. Goat Health Handbook
2. Sheep Health Handbook
3. Eval of Bulls etc.
4. AHD report
5. APD Overview
Antigua
2. Controversial Problems in Clin Practice/Farrow/’78
3. Fundamental Concepts of Biology/Nelson et. al/’70
5. Lab Exercises in Microbiology/Pelczar & Chan/’72
6. Microbiology/Pelczar & Reid/’65
7. Handbook of Veterinary Procedures and Emergency Treatment/Kirk & Bistner/’70

Barbados
1. 1981 AVMA Audio Visual Catalog and 1983 Supplement

Jamaica
1. Proceedings of the American Association of Sheep and Goat Practitioners Regional symposium, 1987

Trinidad and Tobago

Swaziland
1. Miller’s Anatomy of the Dog, 1979
2. Bovine Med and Surgery ’80

Botswana
1. Bovine Med and Surgery ’80

Lesotho
1. Bovine Med and Surgery ’80

Zambia
1. Bovine Med and Surgery ’80

The Gambia
1. Bovine Med and Surgery ’80
2. Veterinary Virology/Mohanty & Dutta
3. Cell Biology/DeRobertis
5. Genetics and Animal Breeding/ Johansson & Rendel
7. Local Anesthesia in Vet. Med/ Tufvesson
8. The Vertebrate Body/4th Ed.-Romer
10. Microbiology/Carpenter/3rd Ed.
11. Comparative Vertebrate Embryology/
12. Canine Neurology/71
13. Blood and Henderson/74
14. Duke’s Physiology of Domestic Animals/70
15. Principles of Genetics/72
16. Ophthalmology/73
17. Clinical Veterinary Oncology/77
18. Feline Cardiology/77

Ghana
1. Bovine Med. and Surgery ’80

Zimbabwe
1. Small Animal Clinical Nutrition/ Lewis & Morris
2. Basic Guide to Canine Nutrition
3. Animal health Production and Pasture
4. Small Animal Clinical Nutrition

Belize
1. Clinical Lab Medicine/Tasker/’76
2. Feline Medicine/Small/’76
3. Microbiology/Pelczar & Reid/’72
4. Ophthalmology/ Pelzifer/’80
5. Trauma/ Crane/’80
6. Urinary Tract Infections/Osborne & Klausner/’79

St. Lucia
1. Canine Pediatrics/Mosier/’78
2. Clinical Hematology/Jain & Zinkl/ ’81
3. Cryosurgery/Withrow/’80
4. Current veterinary Therapy in Small Animals/Kirk/’74
5. Diagnostic Procedures in Veterinary Medicine/Carter/’73
6. Radiology/Suter/’74
7. An Atlas of surgical Approaches to the Bones of the dog and Cat/ ’79
8. Histology and Comparative Organization; a text-atlas/’74
9. Shock/’76
10. The Skin and Internal Disease/ ’79

British Virgin Islands
1. Canine Surgery/’74
2. Surgical Techniques/’79
3. Veterinary Surgical Anatomy/’70

Uganda
1. Money Management/’76
2. Elementary Pharmaceutical Calculations
3. Soil Ecology/’77

Science is facts: Just as houses are made of stones, so is science made of facts, but a pile of stones is not a house and a collection of facts is not necessarily science.

— Henri Poincare
COMMONWEALTH HELPS AFRICA PROMOTE LOCAL PHARMACEUTICALS

Measures to develop local pharmaceutical industries and reduce African countries' reliance on imported drugs have been outlined in a report published recently by the Commonwealth Secretariat in London.

The report follows a survey of the industry in East, Central and Southern Africa. It says that some drugs produced in countries like Kenya and Zimbabwe are of sufficiently good quality to make imports of these drugs unnecessary.

But bureaucratic delays, out of date regulations and unfair competition by foreign companies are hampering progress by local manufacturers.

The report urges governments to buy locally-produced medicines whenever possible and, if necessary, to relax patent regulations to facilitate the growth of the national industry.

It suggests that international companies should be encouraged to set up joint venture plants in Africa to produce pharmaceutical chemicals, needed as raw materials by local manufacturers.

Multi-nationals should concentrate on making their own research-based drugs and leave the more basic products to local companies.

The report has been produced by the Industrial Development Unit (IDU) of the Commonwealth Fund for Technical Co-operation, the developmental arm of the Secretariat.

It is based on findings by two IDU consultants, Dr. J.N Banerjee of India and Dr. Riaz Khan from Pakistan, who visited Africa as part of the project.

Dr. Banerjee is a former president of the Commonwealth Pharmaceutical Association (CPA), founded in 1969 to promote the interest of pharmaceutical science and the profession of pharmacy in the Commonwealth.

Dr. Khan is a former adviser to WHO and the United Nations Industrial Development Organisation. Both he and Dr Banerjee have first-hand experience of pharmaceutical industry in developing countries.

IDU undertook the project following a request for assistance from the PTA Secretariat in Lusaka, Zambia. PTA is short for Preferential Trade Area for Eastern and Southern States to which 20 African countries belong.

Dr. Banerjee and Dr Khan carried out an in-depth study of the local pharmaceutical industry in the region. They held discussions with the PTA Secretariat and government officials in Kenya, Malawi, Zambia and Zimbabwe as well as the local manufacturers.

They exchanged views and information with several international agencies active in the drugs field in Africa. IDU staff also collaborated with these agencies in the development of the project.

Dr. Khan visited India to look at the possibility of transferring technology to Africa from a country which has over 5,000 licenced drug producers - more than any other Commonwealth country.

He and Dr Banerjee gave practical advice to local pharmaceutical units on good manufacturing practices, factory lay-out, processing, equipment selection and quality control.

They identified several new projects, including the production of starch and liquid glucose from maize and cassava and pharmaceutical glassware in Malawi and Zambia.

They suggested the establishment of plants for intravenous fluids production in Kenya, Lesotho and Malawi.

IDU has already provided an expert to help expand the product range of a recently established pharmaceutical factory in Malawi.

Among proposals they made were:

- A training workshop in good manufacturing practice and quality control;
Establishment of regional pharmacy colleges and research and training institutions;

- Relaxation of tariff regulations governing local production of drugs;

- Action by PTA governments to harmonise tariff and licensing procedures to curb imports of goods produced locally, and

- Preference for local products when government hospitals, health departments and others buy drugs. All purchases to be followed by prompt payment.

IDU staff and the consultants took part in meetings of pharmaceutical buyers/sellers and experts/officials held by the PTA Secretariat, followed by the PTA Health Ministers conference in Nairobi in October. They explained the background to and recommendations of the report, which was adopted by the conference.

Mr Tony Polatajko of Britain, an assistant director in IDU who supervised and guided the project from its London headquarters, said it would enable PTA members to integrate their policies and help establish local pharmaceutical industries.

He said: “This project is part of a broader programme of assistance to PTA aimed at promoting industrial development which has included iron and steel, cement, pesticides, fertilisers and engineering.

“We've been concerned not only with the formulation of regional industrial strategies but also with developing commercially feasible production units.”

Mr Alban Couto, a former Additional Secretary in India's Ministry of Industry who heads IDU, said industrial development can make an important contribution towards enhancing the quality of life and promoting human resources development and health. It can also help protect the environment.

He added: “The assistance provided by IDU to the pharmaceutical sector demonstrates these new dimensions in technical assistance for development which are gaining higher priorities in the economic development plans of international and regional organisations such as the PTA”.

Further information can be obtained by writing to Director of Industry, PTA Secretariat, PO Box 30051, Lusaka, Zambia, or to Mr Alban Couto, Director, Industrial Development Unit, Commonwealth Secretariat, Marlborough House, Pall Mall, London SW Y 5HX, United Kingdom - Commonwealth Features Feb. 1990

**NAMIBIA BECOMES INDEPENDENT AND JOINS COMMONWEALTH**

In 1890 Germany made South West Africa a colony and series of wars were fought between 1904 - 07 against the Herero and Namib people (hence the name Namibia). In 1946 South Africa annexed Namibia and ever since, it was subjected to S. Africa's apartheid practices. In 1960, SWAPO was founded to fight for independence of Namibia and after nearly 30 years of struggle on 21st March 1990 Namibia became independent and also became the 50th member of the Commonwealth.

Mr Sam Nujoma – became its first President. Mr. Nujoma who was in exile for 29 years out of which 23 years were spent leading SWAPO's armed struggle against S. Africa's illegal occupation of Namibia.

Namibia has a population of 1 - 7 million people scattered over 823,145 Sq. Kms.

**POPULATION OF SOME COMMONWEALTH COUNTRIES OF ASIA**

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<tr>
<th>Country</th>
<th>Population</th>
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<td>India</td>
<td>817.4 million</td>
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<tr>
<td>Pakistan</td>
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<tr>
<td>Bangladesh</td>
<td>119.6 million</td>
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<tr>
<td>Sri Lanka</td>
<td>16.9 million</td>
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<tr>
<td>Maldives</td>
<td>0.2 million</td>
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Village Co-operative Movement and the "White Revolution" in India.

It all began in 1948 when 27 year old Kurien armed with a master's degree in mechanical engineering from Michigan State University was assigned to work with a government dairy in Anand. Trilvandras Patel, chairman of a nascent milk cooperative, shared space with the government dairy. Thus began a remarkable association between Kurien and the gujarat farmers' cooperative.

At that time there was hardly any equipment worth the name in Anand. But the dairy had the onerous responsibility of providing milk to the city of Bombay over 400 km away. And that was a challenge Kurien took up.

Pasteurising milk in Anand began on November 20, 1946. It is an incredible story. The story of D. Verghese Kurien and his pioneering efforts in dairy development in free India. A four-decade saga in milk production and marketing. Almost from scratch. It all began virtually from a shed.

It has been without a parallel — a nuclear physicist and engineer trained abroad settling down in remote Anand (Gujarat) in 1945 and building up one of the world's largest milk empires, bottle by bottle and winning laurels all the way the latest being the World Food Prize which Kurien received on October 17, 1989.
June 1948 with farmers from two villages supplying 250 litres of milk. A ready market had its impact and by the end of the year the cooperative's membership touched 400 and the Kaira District Cooperative Milk producers Union Ltd. started handling 5,000 litres a day.

The movement spread to the entire district rapidly. It created a problem; a problem of plenty. Once again the farmers had to sell milk at low rates to middlemen. Kurien found that the remedy to this problem was to set up a plant to process milk into butter and milk powder. The then government of Bombay and the Government of India acknowledged his plans and UNICEF was approached for financial assistance. Help came from the government of New Zealand under the Colombo Plan and FAO provided technical assistance. In all an investment of Rs. 5 million.

Once the decks were cleared, work began briskly. On November 15, 1954, Dr. Rajendra Prasad President of India laid the foundation stone and the plant was opened on October 31, 1955 by Prime Minister Jawaharlal Nehru.

From then on there was no looking back.

The factory started producing sweetened condensed milk in 1958. Morarji Desai, then finance minister, inaugurated in 1960 another plant to manufacture 2,500 tonnes of roller-dried baby food and 600 tonnes of cheese per year.

The former was based on a formula developed with the assistance of the Central Food Technological Research Institute in Mysore.

Till then manufacturing milk products was the exclusive privilege of multinationals and they had made everyone believe that babyfood and cheese could not be made from buffalo milk. Kurien demonstrated, for the first time anywhere, that these products could be made from buffalo milk on a commercial scale.

As years rolled by, the Anand farmers' cooperative marched ahead. In 1964 a cattlefeed plant was started. A new dairy with a capacity to produce 40 tonnes of milk powder and 20 tonnes of butter a day for defence needs and a plant to make high protein weaning food, chocolate and malted food were added in course of time. Today the Anand complex can process 800,000 litres of milk a day. It has 890 village societies with 423,000 members, and the turnover has touched a whopping Rs. 16.14 million.

A very important moment in Kurien's life came when Prime Minister Lal Bahadur Shastri took the Anand model to the world and invited the United Nations to study the Anand co operative. Thus was born the new doctrine of the co-operative movement — the solution to all economic ills of the masses.
hadur Shastri visited Anand. The simple Shastri wanted to spend a day in a village when he went to inaugurate the cattle feed plant in Anand. Kurien chose the house of Ramanbhai Punjabhai Patel in Ajarpura village, two kilometres from Anand, for Shastri to stay and the later saw at first hand how the cooperatives functioned. The next day he offered Kurien chairmanship of the National Dairy Development Board and asked him to replicate the Anand experiment all over the country.

The NDDB has drawn flak for its dependence on imported milk powder. It provided a point for critics to say that Operation Flood was yet to achieve its objective of self-sufficiency. But Kurien has to be congratulated on organising 'Operation Flood' without a paisa from the government.

It is a tribute to Dr. Kurien's vision that today the world over, Anand has become a shining symbol of a well manged dairy revolution. No wonder, during the recent world dairy conference, China proposed a resolution to set up a training centre in Anand, mainly designed to help replicate Anand type revolution in Asia and Latin America.

On its part, China is now half through in putting together a dairy movement on the lines of Anand.

Significantly, prior to Anand, India's approach to dairy development lacked cohesion and direction. However, the Anand model has become since 1970 the guiding principle of the white revolution in India. The National Dairy Development Board (NDDB), set up in 1965 under the stewardship of Dr. Kurien, by making use of the dairy surplus donated by the European Economic Community (EEC) unleashed "Operation Flood" with the objective of ending the milk famine in the country.

The successful completion of the two phases of Operation Flood has contributed to the steady availability of milk to the consumers at a reasonable price, as also a remunerative price to the milk producers based mainly in the countryside.

The third phase of Operation Flood, now in its initial phase, in conjunction with the National Technology Mission hopes to increase the average yield of cows from 350 litres per annum to 640 litres, and in buffaloes from 910 litres to 1020 litres.

In view of the substantial increase in India's milk yield, the NDDB has requested the EEC to provide cash equivalent of the dairying surplus being
offered as donation. To make best use of the surplus milk and also to diversify its operational base, the NDDB has drawn an ambitious scheme to manufacture and distribute ice cream, yoghurt and cheese.

At the termination of the Operation Flood-III in 1994, milk procurement is expected to increase from 7.8 million litres a day to 150.00,000 litres, and an additional 80,000 villages in 270 districts would stand to gain. Dr. Kurien explains that "this mission extraordinary" was accomplished "without the contribution of a paise from the Government."

According to him, it is the spirit of a cooperative with right motivation that helped pull off the white revolution of Anand. As Dr. Kurien says, "co-operative movement in India is as old as civilisation. Let us rediscover the birth of the unlettered villagers is often the wisest of teachers and he can even thrive in conditions we could not face."

Projecting the raison d'être of Operation Flood, Dr. Kurien observes, "The initiative and energies of the millions of Indian rural producers when unleashed and combined with an appropriate technological and managerial inputs can overcome the challenges of meeting the requirements of the nation."

Basically, Operation Flood was conceived to organise milk producers into co-operatives while ensuring remunerative prices to milk producers round the year by eliminating the middleman in the business.

The target of NDDB is to push up milk production to 70 million tonnes by the year 2000. This would boost the per capita milk availability from the present 160 grams to 196 grams a day.

One of the weak spots of dairying scenario in India is an excessively large livestock population feeding thinly on a limited forage. The stark fact is that though India has the largest cattle population — 180 million cows and 61 million buffaloes — it has one of the lowest milk productivities in the world.

For instance, the average productivity of a cow in India is around 400 litres of milk per annum. This stands in sharp contrast to 7,000 litres of milk yield in Israel per lactation period of 14 months. It is the distortion in India's milk production that the national technology mission on dairying plans to set right through a time bound action plan.

To start with, the mission will strive towards ending the problem of cattle stock cross breeding and selective rearing of indigenous breeds. About one hundred thousand veterinary doctors and para medical personnel in the country will be mobilised for the purpose.

Fodder and feedstock for the milk animals is another area to be attended to. In India, cattle for most part subsist on very poor quality fodder, basically fibrous straw from farm wastes. As it is, only 4 per cent of the land under cultivation is devoted to fodder crop.

Kurien has since taken up marketing vegetables at reasonable prices in Delhi. The edible oil scheme has however come in for criticism. Critics allege that millions of rupees were made by NDDB through monopoly procurement of groundnut oil in Gujarat. But as a result it could prevent wholesalers from hoarding.

Recently Kurien launched three new cooperative projects - salt, tree growing and power generation. While the power generation project is being worked out, the salt and tree growing projects are already functioning.

Salt producers of Gujarat, who account for 64 per cent of the country's total production, have been exploited for generations by traders and money lenders. The NDDB launched a pilot project at the request of the Gujarat government so that the producers got a better deal. The Sabarmati salt farmers' society, which was entrusted with the task, bought 16,000 tonnes of salt in 1987 from 27 agrias (salt producers) who were paid 20 to 25 per cent more than what they received during previous years. In 1988-89 the society bought 45,000 tonnes of salt from 81 agrias.

The society has since repaid the bank loans. Encouraged by the success of the programme, banks have expressed willingness to advance any amount to agrias. In short, producers are now free from the shackles of money lenders.

The tree-growers' cooperatives were formed to deal with the problem of degradation of land. India has a land mass of 329 million hectares and at least half of it is degraded. In the agriculture sector out of 143 million hectares at least 40 million hectares are degraded and in the forestry sector 30 million hectares of the 75 million hectares are without tree cover.

With the increase in cattle population and the demand for fuelwood, forests have shrunk. Prices of fuelwood, the
most common energy source in rural areas, have shot up by 500 to 700 per cent in the last two decades. The NDBB was asked by the National Wastelands Development Board to join in the effort to revegetate wastelands. In August 1986 it evolved a pilot project for tree-growers' cooperatives aimed at inducing people in rural areas to meet their minimum fuelwood and fodder needs.

The project envisages the greening of eight districts through 84 cooperatives. So far, 55 tree-growers' cooperatives have been set up with 4,867 members. About 250 acres have been planted with grass, fodder and fuel wood trees.

The Canadian International Development Agency chipped in with an assistance of US $40 million for this and 600 tree-growers' cooperatives in Gujarat, Andhra Pradesh and Karnataka are to be set up over nine years. The Swedish International Development agency has, in principle, agreed to allocate Rs. 600 million for similar projects in Tamil Nadu, Rajasthan and Orissa.

The Anand experiment has received worldwide attention. Under the leadership of Kurien the cooperative movement has gone places. He has set up a management institute and an institute of rural management in Anand. These two institutes will make sure that the flame lit by Kurien in cooperative management will be spread far and wide to usher in a new life in villagers.

Dr. Kurien has been ably assisted by Dr. (Miss) Amrita Patel, a veterinarian who is the Managing Director (Operations).

Indian Immunologicals

National Dairy Development Board has setup a Biological Product Manufacturing Unit in 1983 known as Indian Immunologicals at Hyderabad. This facility was created for manufacture of FMD Vaccine employing technology obtained from Wellcome Foundation Ltd, UK. The plant is located 17 KM west of the city of Hyderabad, capital of Andhra Pradesh State.

The total area of the Indian Immunologicals complex is 213 acres of which the vaccine plant and the staff housing complex occupy approximately 50 acres while the remaining land is used for an animal farm to rear animals required for testing of the vaccine.

The vaccine plant area is broadly divided into the following:

i) Vaccine Production Laboratory:

The vaccine production laboratory is designed for an annual production capacity of 25 million quadrivalent doses of FMD vaccine with a provision for expansion upto 37.5 million quadrivalent doses. The vaccine production laboratory is divided into restricted and unrestricted areas.

The restricted area consists of various laboratories and production areas which handle live virus whereas in the unrestricted area, the media production unit, tissue culture laboratory, general testing laboratory, glassware washing area, blending and filling areas are located. Integration of the different facilities in an appropriate manner facilitates smooth working and maximum efficiency in the operations.

ii) Services:

The services mainly include air handling, steam generation, power supply, compressed air, chilled water supply and various water treatment units. Adequate spare capacity built into the design of the services renders uninterrupted supplies.

iii) Animal Isolation Units:

Animal isolation units comprise a large animal testing unit, innocuity testing unit and small animal testing unit where various tests are carried out on the animals for judging the quality of vaccine. Besides, these units are used for raising the total requirement of antisera for the quality control and R&D functions.

iv) The small laboratory animals such as guinea pigs, rabbits, mice etc. are reared in the small animal breeding unit located within the plant premises. These animals are reared under controlled temperature conditions. The total requirement of the small animals of the plant is met from this unit.

Besides the above facilities, the necessary cold storage for the vaccine, the general purpose warehouse and amenities for the staff are provided in the plant complex.

v) Animal Rearing Farm:

Indian Immunologicals has the unique facility of rearing FMD free animals (in isolation for a period of 12-25 months) required for potency and innocuity testing of vaccine. Crossbred male calves are obtained from farms which have
no history of FMD for a period of 2 years prior to collecting them. The animals are collected at the age of 1 to 2 months and kept in quarantine for at least 21 days and later introduced on the farm. To prevent the movement of workers and material from nearby villages on the farm, and to reduce the risk of transmission of FMD to the animals reared in the farm, an open air prison has been established in the farm area. The prisoners carry out all the agricultural and related activities including animal management and all the fodder required for the animals is met from the farm.

All susceptible animals such as cattle, buffaloes, sheep and goats in a 10 KM radius around the farm are vaccinated with FMD vaccine twice annually to create an FMD immune zone, thereby reducing the possibility of any FMD infection to the animals reared in the farm.

**Production of Vaccines:**

1. **FMD Vaccine:**

   Inactivated Cell culture FMD vaccine is produced in the plant.

2. **Inactivated BHK-21 cell culture rabies vaccine for veterinary use is being manufactured.**

3. **Theileriosis Vaccine:**

   Cell culture vaccine using lymphoblast cultures containing schizonts of Theileria annulata is manufactured.

**Formulations:**

Various formulations such as:

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**Pakistan Veterinary Association Becomes a Member of the Commonwealth Veterinary Association**

Subsistence in the rural areas. Veterinarians serve mainly in the public sector but private poultry industry, poultry feed industry and practice is slowly catching on.

The Pakistan Veterinary Medical Association (PVMA) was constituted only in 1982. The Association is playing a role in the improvement of veterinary profession in the country. In continuing its professional activities, the PVMA has planned to organize the 3rd International Congress on 24-25th October, 1990 at Islamabad. The programme includes 4 sessions each on Animal Health, Production, Poultry and Education.

Dr. A.A. Ramzee
Secretary, PVMA

Pakistan is a developing country where livestock is the backbone of the agrarian economy. Although, organized farms are being developed, only a single or few buffaloes or cows and herds of sheep and goats provide

Dr. Israr Shah
Min. of Vet. Science, Pakistan

Or behalf of the PVMA, the President has extended an invitation to participate in the Congress and take part in the deliberation.
The patron of CVA, Sir Dawda Jawara was in Singapore in October 1989. The Singapore Veterinary Association took the opportunity to pay a courtesy call on His Excellency. The Association was represented by its President, Dr. Y.K. Ho, its vice-President, Dr. Jean Paul Ly and the CVA Councillor for Singapore, Dr. C.H. Giam. The patron was gracious enough to grant the Association time from his very busy schedule at which Sir Dawda was briefed on the Singapore Veterinary profession. I enclose a photograph of our courtesy call on Sir Dawda at his suite in the Pan Pacific Hotel, Singapore on 26 Oct 89.

ARTIFICIAL BREEDING IN DOGS (AB)

Canine artificial breeding offers the same exciting opportunities that it does for other livestock industries. For many breeders the most significant benefit is being able to freeze semen as insurance against sterility or death of a stud dog. Importation of semen is also an attractive option for breeders, and breeding programmes will benefit with the freezing of semen from dogs free of inherited defects.

Marion Wilson, a 1975 Glasgow graduate, has developed a commercial canine artificial breeding service, offering storage of frozen semen, import and export of frozen (and chilled) semen and insemination of bitches. Glenbred Dog Artificial Breeding Services is situated at Rewa, near Feilding, New Zealand, where Marion and her husband Jim have a hill country farm.

In 1988 Marion was awarded a Trimple Agricultural Research Fellowship to travel overseas and gain first hand experience from European workers using (AB) in dogs. In Norway, insemination techniques developed for the commercial purpose for the fur industry (about 75,000 vixens inseminated annually) have been adapted for dogs. They achieve conception rates of 70-80% and normal litter sizes.

The following officers were voted into office for 1989'1990 at the AGM in Oct. 1989:

President
Dr. Y.K. Ho

Vice-President
Dr. Jean Paul Ly

Honorary Secretary
Dr. L.N. Choo

Honorary Treasurer
Dr. Kelvin Soh

Marion is enrolled for a Masterate at Massey University, looking at some of the problems of insemination with frozen semen. As timing and technique are critical to achieve good results, she is investigating non-surgical techniques, simple rapid progesterone kits, and the use of a lower insemination dose.

— Vetscript October 89
John Cornwall appointed Veterinary Director

Dr. John Cornwall, former SA Government Minister and veterinary surgeon, has been appointed Veterinary Director of the Australian Veterinary Association.

Announcing the appointment, AVA President Dr. Ian Fairnie, said Dr. Cornwall had extensive experience over 20 years as a veterinary surgeon with both commercial and companion animals before being elected to the South Australian Parliament. He served as a Minister for Environment and Lands in 1979 and as Minister for Health and later as Minister for Health and Welfare between 1982 and 1988.

Dr. Fairnie said this was a new appointment which reflected the importance the Association gives to professional and technical issues in dealing with the membership, Governments and other organisations. It also indicated the extent to which the AVA is now called upon by governments to respond quickly and authoritatively to issues concerning animal health, welfare and productivity which are vital to Australia's economy and trading interests.

Dr. Cornwall has a wealth of experience in dealing with complex technical health issues, combined with a strong grounding in veterinary science, and joins the National Office staff where he will work closely with Executive Director Warren Bassam in achieving the Association objectives for the future.

Health — it's in your hands say ministers

Commonwealth health ministers, meeting in Australia in November, have agreed a new agenda to bring people in both developing and developed countries into more active partnership with government in national health programmes.

They want more emphasis on healthy living and more support and higher status for community health schemes. They also want better North-South collaboration in combating communicable and chronic diseases (heart disease, cancers etc) previously largely ignored in industrialised societies, but now increasingly affecting developing countries.

Notable among ministers' recommendations is agreement that all governments should work towards a complete ban on all advertising of tobacco products, and close regulation of advertising of alcohol. They also want communities to be assisted to set up or improve local health systems, and new help from regional and international organisations to do this.

Australian Minister of Health, Dr. Neal Blewett, who chaired the meeting, announced new initiatives by Australia to support these efforts. Australia is offering $8 million over the next four years for community-based programmes to fight AIDS.

Local schemes for AIDS education and home care for sufferers will get priority. Australia will also support joint studies into chronic diseases, and will share its planned communicable diseases surveillance network with other countries, particularly the Asia-Pacific region.

'Empowering the people' was a phrase widely used at the meeting. This amounts to giving state support to existing informal health structures, including alternative health practitioners and traditional healers and birth attendants.

Central to these structures was the community health worker. Training in health education, diagnosis, caring for the sick and the dispensing of simple medicines, is strongly endorsed by the report, which encourages training for nurses and primary health care workers in community understanding.

Ministers have asked the Secretariat and regional organisations to study successful community systems and develop practical training courses, training texts and other materials. They also asked the Commonwealth of Learning to develop training courses to help health workers relate more effectively to the community. Such courses should lead to a recognised qualification.

Fertile Music:

Fertile Music: Folk music has turned 30,000 average chickens into some of the happiest, and productive, hens in China. When they listen to Chinese folk music, the hens bob their heads, shake their tail feathers, and lay more eggs, according to the Beijing-owned China News Service (CNS). Their owner, who farms near scenic Xiwu lake in the city of Hangzhou, said he began the experiment two years ago. He's happier too. The extra eggs have so far netted a handsome $11,000.

— Reuters.
We forget what a good service we provide
(and therefore how good we really are!)

We are our own worst enemies. We so easily forget how good we are and what a great service we can and do offer.

Have you ever seen a medical clinician cope with pyothorax, renal failure or gastric torsion in a mute patient unable to suggest an area of pain or describe what they have ingested in the last 24 hours or offer a hint as to the reason they may be distressed enough for others to notice a clinical change?

No you haven't! But we do exactly what no other profession can. We make diagnoses with minimal assistance of either technology, support staff or specialists in the "Veterinary Diagnosis" way i.e. the way a medic makes a diagnosis in pre-speech children — called a "Vet Diag" because it is so difficult. But how did you hear "Vet Diag"? Did you hear it positively as "yes, in spite of it all we do a good job", or negatively as "Yes, I do miss a lot and feel bad about it"? If it was the latter, please read on! If it was the former, please write and tell us how good you are and why you have such successful and fulfilling days.

It is a difficult profession and we have so little with which to compare our accuracy and efficiency. Who else has to deal with the Pug or Peke with up to nine URT defects when it is seen as "just another dog and devoted client"? But if it were a human case, think of the specialists and technology available to help diagnose a brychocerebral dysphonia. Our problem is we as clinicians see a case as just another dog to spay or whatever, and not the complicated pathophysiology they may represent. And so we downgrade our abilities into a negative image of ourselves and of the considerable talents we have to successfully handle such different cases.

Medicos often see us as using old techniques, older drugs and less technology and back up. They can’t possibly empathize with our lot and would only see us in terms of their reality — no health related economics, no biting or kicking patients, support staff and technology of all sorts and the prestige (all be it sometimes false) that the general public offers.

We have to face the economic reality of Veterinary Science — i.e. to cope with and accept that we are not on the same level as other professionals of similar fields and training demands at University. We also face the constant battle of diagnostic accuracy. Do we go for technological assistance (cost barrier) for more accuracy or wait and see?

Obvious to us all is the lack of history in many cases (e.g. ingestion toxicities) and the vagaries in the variation of clinical signs, species variation etc etc. You know it all but we too easily see the negative and say "Why don’t I get it all right, sooner, better?" We fail to see that most of the time, in spite of all the very real difficulties we have to contend with (compared to our most available control, medical clinicians) we do a great job. We are correct most of the time in spite of the lack of information we have when the patient arrives. We get it all together ourselves, orchestrate the plot, seek clues, solve the mystery and satisfy the owners.

Who can appreciate our good work in the light of the reality of veterinary Practice? No one can, not our clients, our partners, or other related professions. Nobody but ourselves can realize our qualities in the light of the difficulties. Nobody but ourselves can belittle our professional esteem as we as a group of highly trained, motivated people seemingly do with ease. No one but ourselves can make us feel ineffective as clinicians.

We are (ultimately) responsible for one person only: one person is (totally) responsible for us. As in our personal life, our professional self esteem is similarly totally our own responsibility. When we learn to see clearly how good we are and how well we do cope with our lot, then and only then will our professional self image rise and, with it, the respect and appreciation of clients who will come to feel the quality and touch the excellence we offer and project by our positive self image.

It is possible and will happen — believe in it and it will become!

— September, 1989

Malaysian veterinarian honoured at U of Guelph

The founding dean of the Faculty of Veterinary Medicine and Animal Science (FVMAS) at the University of Pertanian Malaysia was awarded an honorary doctor of laws degree from the University of Guelph for his contributions to veterinary medicine and education in southeast Asia. Bin Abdul Rahman Omar was born in Malaysia and received his veterinary degree at Sydney University in Australia. After serving as a research officer and deputy director of the Veterinary Medicine Institute in Ipoh, he founded the FVMAS in 1972. With assistance from the governments of Canada and Australia, he developed and implemented a new curriculum, planned and initiated construction of new physical facilities, and embarked on a faculty training and development program. Omar received his honorary law degree in October.
Familial predisposition in feline hyperthyroidism

Hyperthyroidism is the most commonly diagnosed endocrinopathy in the cat. Overproduction of the thyroid hormones, triiodothyronine (T3) and thyroxine (T4), is attributable to thyroid adenoma in more than 95% of cases. Locally an innocuous tumour, its ‘malignancy’ stems from the enhanced tissue catabolism that is initiated by high levels of these hormones. The result is a disease state that is multisystemic in nature. Although no breed or sex predilection exists, the disorder characteristically affects the age groups between six and 20 years. The cause of tumour development in these cats has yet to be discovered.

Thyrotoxicosis was diagnosed in three related cats, a female and two male offspring, belonging to the same owner. Initially recognised in one male five years previously, the disorder was subsequently diagnosed in his dam and later in his sibling. Major signs common to the three patients were: weight loss, a palpable mass localised in the ventral neck region, a systolic cardiac murmur, pyrexia, polypnea and dyspnea. Two of the cats exhibited sinus tachycardia and one cat had a history of chronic vomiting. The T4 levels were significantly elevated in all three cases.

The familial relationship amongst these cats suggests a possible genetic susceptibility to hyperthyroidism. In man, the most common type of thyrotoxicosis is autoimmune mediated and is hereditary in nature. Although autoimmune activity does not appear to be a causative mechanism in the cat, this does not preclude the existence of a familial predisposition to this disorder.

Since these three cats were raised together in the same house, we are unable to rule out the possibility that continuous association may promote the horizontal transmission of some unidentified contagious agent. Common exposure to an environmental toxin must also be considered. It would be interesting to determine the prevalence of feline hyperthyroidism in litter mates and offspring housed in dissimilar environments.


The Credo of a Best Friend

I will work and play to make our friendship all that it can be while acknowledging all that it is.

I will be emotionally honest, even when saying how I feel causes a rift.

I will cheer my friend’s success, recognising the occasional feelings of jealousy, competitiveness and fear in myself.

I will take an active role in defining our friendship by stating what I want and listening to what my friend wants.

I will accept my friend as he is, recognising occasional judgements I may make and negative attitudes I may harbour against him.

I will live by the mutually agreed-upon limits of our friendship, propose changes where I feel they are necessary, and negotiate disagreements in good faith.

I will accept the ways we are different from one another and with an eye towards deepening my understanding and tolerance of things unknown to me.

I will give unselfishly of myself without expecting a return on my love. What come back to me is a bonus.

I will be tolerant and forgiving. Since none of us is perfect, I have no right to expect our friendship will be perfect.

And finally, I will always remember Ralph Waldo Emerson’s words of wisdom: “The only way to have a friend is to be one”.

There is a part of our humanity which can only be recaptured if and when we relate with the men of our time. This part of us is nowhere else to be found. Is it not time we resolved to set out in search of that missing piece?

From The Secrets Men Keep by Ken Druck, Ballantine, New York.
GUYANA
The Government of Guyana has shown keen interest in developing tourism. It has started developing as a Tourist Resort Kaieteur Falls, whose cascade on the Potaro River descends for 822', five times as far as Niagara Falls. It also hopes to focus attention on its Rupununi Savannahs and on the towns of Bartica, new Amsterdam and Anna Regina. In developing these spots, the Government of Guyana has sought the experience of other Caribbean countries in getting its Tourist Industry geared up. Its financial expenses will be funded by the Caribbean Community and by the Caribbean Development Bank.

BARBADOS
The number of tourists to Barbados has been increasing during the last few years. During the year 1986, 370,000 tourist visited the Islands spending approximately BD$ 618 million. Barbados has diversified its Agricultural Programme by concentrating on vegetable production, mechanised farming, Agro Industry & Development and Irrigation. Commercial flower production is also being studied. $ 4 million loan from the World Bank will finance this Programme.

JAMAICA
Health spending in Jamaica rose by 42% in 1987-1988 with JS $ 31 million of assistance from United States Agency for International Development and JS $ 150 million from the Inter American Development Bank.

Jamaica has announced plans to start excavating and reconstructing the historic city of Port Royal which was destroyed in a earthquake in 1692.

NEWS! NEWS! NEWS!
1. The Bont Tick Eradication Programme was approved in principle by USDA/USAID, such a programme must be prefaced by
(a) Wildlife Study — September — November, 1988
May — June, 1989
September — October, 1989
May — June, 1990

The Wildlife Study was designed to determine the migrating trend of Wildlife (birds, etc.), acting as interbreeding hosts and in due course delatory effect of the ticktoide used in extermination on the Wildlife both fauna and flora.

The Economic Study is designed to determine the delatory effect of the Bont Tick infestation and the concomitant dermatophilosis on Livestock production and so qualify economic benefits on a successful eradication programme.

II. A School of Veterinary Medicine in the Medical Science Complex, University of the West Indies, Trinidad, in October, 1989. It is intended to be an accredited School acceptable to the BVA, AVMA and CWVA. Antigua and Barbuda has availed itself of this training opportunity by sending Miss Carmen Lake on scholarship in the first batch of students. She did her pre-Vet.
Studies at the Nova Scotia Agricultural College, Truro, Nova Scotia, Canada.

III. Antigua and Barbuda were hit by Hurricane "Hugo" on 16th September, 1989, causing millions of dollars of damages in its wake. The Veterinary & Livestock is estimated to have suffered about $850,000.00 EC.

IV. The Commonwealth Co-ordination Department of the Foreign and Commonwealth Office in London have agreed to provide an excursion return air fare Antigua/Harare/Antigua at a cost of US $2,339.00 and five nights subsistence in Harare for one delegate from the Caribbean to attend this Pan Commonwealth Veterinary Conference scheduled for 10th - 14th September, 1990.

V. As it to support the Theme of the Pan Commonwealth, Theme of "Animal Health" and Production — 2001" The EEC under this home 111 agreement has approved a sum of $4.0 million EC for Livestock Development Improvement for Antigua & Barbuda. The three Consultants for the Program began arriving in Antigua in the Spring of 1989 and are in place. The subject matters identified are Extension, Pasture Development and the establishment of Communal Grazing Areas and individual Small Farm. The Government of Antigua and Barbuda will support the program with provision of land, resource persons and a small infrastructure input. Work is progressing satisfactorily.

**Campylobacter: "The Next Salmonella"**

The possibility that thermophilic campylobacters could be associated with human enteric infection was first raised by Elizabeth King in 1957. It took another 15 years before a breakthrough in culture techniques provided the initial evidence that human campylobacteriosis is a zoonosis. Today food-safety advocates in veterinary and human medicine and in public health talk about Campylobacter and Salmonella in the same breath — like partners in crime.

Certain species of Campylobacter have been recognized as animal pathogens for more that 70 years. Originally included in the genus Vibrio, they were reclassified in the early 1960s to the genus Campylobacter, meaning curved rod. The major species in human diarrhea are the thermophilic campylobacters, C. jejuni, C. coli and C. laridis. Among these, C. jejuni is the most frequently encountered species in human enteritis and the most prevalent in food animals such as cattle and poultry. C. coli is mostly isolated from pigs; C. laridis has been isolated from seagulls and can contaminate waters and lakes.

Importance in food safety. The thermophilic campylobacters started to become recognized as enteric pathogens in the early 1970s when a Belgian team isolated C. jejuni from 5% of children with diarrhea, using veterinary microbiological techniques. Subsequent similar investigations using better recovery methods have indicated that Campylobacter is leading cause of acute gastroenteritis in humans around the world. These bacteria are recovered from 4% to 7% of human patients with diarrhea in developed countries and from 8% to 31% in developing areas. In the United States campylobacteriosis is now believed to be more common than salmonellosis and shigellosis together. A 1987 U.S. Senate Committee Hearing on Food Illnesses and Deaths revealed that of the $2.7 billion spent annually as a result of the five major food-borne diseases, campylobacteriosis accounted for 32%, salmonellosis accounted for 36% (ASM News, September 1987, p. 470). In Canada, the accumulated data for the first eight months of 1989 show an increase in Campylobacter isolations from humans and a slight decrease in Salmonella isolations over 1988 (H. Lior, Laboratory Centre for Disease Control, Health and Welfare Canada, personal communication). Epidemiology data from British Columbia showed that in 1985 twice as many cases of food-borne infections were attributed to Campylobacter than to Salmonella (Canada Weekly Disease Report, 13:211, 1987).

Bacteriology and disease manifestations. Campylobacter are non-sporing gram-negative bacteria with a curved, spiral or S-shaped morphology. The cells are motile and display a rapidly darting movement. Most species grow best under reduced oxygen tension and are often called microaerophilic. However, research at ADRI, Nepean indicates that C. jejuni is more likely to be 'capnophilic', or CO2 requiring. The thermophilic campylobacter can grow at 43°C and are generally non-fermentative, which limits the value of biochemical tests in routine bacterial identification. To improve strain discrimination for epidemiological purposes, typing systems such as biotyping, serotyping, phage typing and immunotyping have been developed. Molecular methods can further aid strain discrimination and the determination of clonal patterns. Many of the serotypes and biotypes of C. jejuni and C. coli found in food animals are also found in human campylobacteriosis. About 500 cells of C. jejuni can cause an infection.

Acute enteritis is the most common clinical feature associated with C. jejuni infection. A prodromal phase lasting up to two days may involve fever, myalgia, headache and malaise, followed by nausea and abdominal cramps that are typically periumbilical.
cal. Diarrhea rapidly follows and may be profuse; stools are foul smelling and either watery or slimy. Fresh blood may appear in the stools after two or three days. In some cases, diarrhea can occur without the prodromal stage. The illness usually lasts a week or less; 25% of patients have a recurrence of the symptoms, mostly abdominal pains. Although C. jejuni enteritis is normally self-limiting, there have been reports of extra-intestinal complications such as Reiter's disease, reactive arthritis, Guillain-Barre syndrome, meningitis, abortions, cholecystitis, transient bacteremia and urinary tract infection. The high frequency of campylobacteriosis and the incidence of these extra-intestinal complications make Campylobacter of paramount importance in public health.

The pathogenesis of Campylobacter enteritis remains unclear. Invasiveness has been suggested as a principal virulence factor, particularly in bloody diarrhea typical of the illness caused by Shigella spp. Adhesive factors have also been isolated. Toxin-induced disease classically typified by Vibrio cholerae has been proposed as a principal mechanism in patients with acute watery diarrhea, which is more common in developing countries. Strains of C. jejuni elaborate extracellular toxins, which include enterotoxic and cytotoxic factors. The role of these toxins, however, is still not well defined.

Transmission and association with foods. C. jejuni enteritis is mainly a zoonotic infection that can be transmitted by various modes. The organism appears to be an innocuous commensal inhabitant of the normal intestinal tract of a range of wild and domestic animals, and in poultry. Since C. jejuni is carried in food animals at slaughter and can survive refrigeration for weeks or freezing for months, all raw meat should be considered potentially contaminated with C. jejuni and should be handled accordingly. Canadian studies have revealed that there is a high incidence of thermophilic campylobacters in the intestines of poultry, cattle and pigs at slaughter. Recent outbreaks of human campylobacteriosis in Canada have been attributed to the consumption of improperly cooked poultry, raw meats or unpasteurized milk. Water-borne outbreaks through contaminated water supply have also been reported. Although poultry has been implicated as the source of several small outbreaks, it is widely viewed that much of the sporadic human Campylobacter infection can be attributed to eating undercooked chicken. Other factors include improper handling of raw poultry and the immediate cross-contamination to hands, surfaces and other foods, whether in a kitchen or at a barbecue. A recent case control study by the Communicable Disease Control Section of the Seattle-King County Department of Public Health reported that chicken consumption was the predominant risk factor associated with C. jejuni enteritis and contributed to about half the cases. The high prevalence of C. jejuni in pets, particularly immature cats and dogs, is also a possible source of the organism in household infections.

AIDS — Drug Development

Therapeutic approaches for the treatment of HIV infection and AIDS include not only specific anti-retroviral drugs but also the treatment of opportunistic infections and of associated cancers. The restoration of the immune system through the use of immuno-modulators is one approach under consideration.

The identification and development of antiviral drugs is proceeding in many different ways. A large number of natural and synthetic compounds are now being routinely screened for antiviral activity. The extraordinary progress that has been made in our knowledge of the molecular biology of the virus has provided important clues to the rational design of drugs which would block or interfere with one or more steps essential for the replication of the virus.

One good example is a drug called soluble CD4, which has been shown to bind to HIV, blocking virus receptors and preventing infection. The potential beneficial effect of soluble CD4 in HIV-infected individuals is currently being evaluated in clinical trials. Other drugs which act by interfering with attachment of the virus to the target cells are also being evaluated. However, so far the only drug which has been shown to have a beneficial effect on persons with AIDS is zidovudine or AZT, and this is the only licensed anti-retroviral drug on the market. In addition, a large number of other compounds are being investigated, but their potential beneficial effect remains to be defined in well-controlled clinical trials.

Some of the most promising experimental and anti-retroviral drugs are nucleotide analogues, which act by a mechanism of action similar to that of zidovudine. One of them is didoxycytidine (DDC), which has been tested in clinical trials in combination with AZT, with the object of reducing the occurrence of toxic effects. More recently introduced in clinical trials is didoxycytosine (DDI), which seems to have a better therapeutic index than AZT or DDC (World Health, October, 1989).
PAN COMMONWEALTH VETERINARY CONFERENCE

Harare International Conference Centre
10 - 14 September 1990 Harare, Zimbabwe

ANIMAL HEALTH AND PRODUCTION - YEAR 2001

The Conference Centre Complex showing the adjoining Sheraton Hotel

Victoria Falls

Organised by - Commonwealth Veterinary Association
Hosted by - Zimbabwe Veterinary Association
Office Bearers of the Conference

Dr. J.T. Blackburn
Conference Chairman

Dr. J. Archibald
Conference Secy. Treasurer

General Organising Committee

Dr. J.T. Blackburn, President, CVA

Dr. J. Archibald, Secretary Treasurer, CVA

Dr. B.N. Touray, V.P., CVA & Reg. Rep. CVA (West Africa)

Dr. J.L. Robinson
Reg. Rep. CVA (Canada Caribbean)

Dr. D.D. Wanasinghe
Reg. Rep. CVA (Asia)

Dr. S.P. Kamwendo, Reg. Rep. CVA (East, Central & Southern Africa)

Dr. W.J. Pryor
Reg. Rep. CVA (Australasia)

Dr. Alastair Mews
Reg. Rep. CVA (UK Mediterranean)
Welcome to Zimbabwe a country renowned for its climate, beauty and wildlife.
The Victoria Falls is one of the natural wonders of the world which is a "must" for all visitors.
We like to think that we have a reputation for hospitality too.

At the Pan Commonwealth Veterinary Congress discover all of these assets of Zimbabwe whilst enlarging your knowledge in the field of Animal Health and Production in 2001.

D.J. Batchelor
President Z.V.A
Zimbabwe Veterinary Association

Dr. D.J. Batchelor
President, ZVA

Dr. Josphat Nyika
Vice President, ZVA

Dr. E. Lane
Secretary, ZVA

Dr. M. Hoyer
Member, ZVA

Dr. B. Wells
Member, ZVA

Dr. C. Savage
Treasurer, ZVA
## PROGRAMME

### Tuesday 11 September 1990

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<td>8.30</td>
<td><strong>SCIENTIFIC CONFERENCE OPENING</strong></td>
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<td>- President, J T Blackburn</td>
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<td>- Chairman, W J Pryor</td>
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<td>8.40</td>
<td><strong>ANIMAL HEALTH</strong></td>
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<td><strong>VECTOR BORNE DISEASES (Plenary Session)</strong></td>
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<td>10.30</td>
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| 10.30 - 12.00 | VILLAGE POTENTIAL OF AQUACULTURE AND DAIRYING | Chairman –  
Freshwater Aquaculture in Village Farming Systems  
- J W Copland (Australia)  
Small Scale Dairy Farming  
- P Butler (Zimbabwe)  
Strategies and Methodologies used in Guyana's Developing Dairy Industry with Special Reference to Small Farm Milk Production  
- R S Surajbally (Guyana) |
| 12.00 - 1.30 | Lunch                                                                |                                             |
| 1.30 - 3.30 | ANIMAL PRODUCTION SIMULTANEOUS SESSIONS                              | ANIMAL HEALTH NEW PERSPECTIVES ON VETERINARY SERVICES  
Veterinary Services in Zimbabwe: past, present and future  
- R Busey (Zimbabwe)  
Government Veterinary Services in 2001, the NSW Model  
- R T Roo (Australia)  
Veterinary Services for the Village Farmer: How can they best be provided? Open Discussion  
Discussion Leader – S P Kamwendo (Malawi) |
| 3.30 - 4.00 | Afternoon Tea                                                       |                                             |
| 4.00 - 5.30 | ANIMAL HEALTH SIMULTANEOUS SESSIONS                                  | PANZOOTICS AND THEIR CONTROL  
Village Veterinary Services Improvement as Adjunct to Rinderpest Control  
- J Thompson (Kenya)  
Wildlife Vaccination in Rabies Control  
- D Voigt (Canada)  
Disease Survey in Communal Lands in Zimbabwe  
- M Huyer (Zimbabwe) |
| 8.30 - 10.00 | VETERINARY EDUCATION & TRAINING                                      | Chairman – J T Blackburn  
The Undergraduate Curriculum in Veterinary Education in Developing Countries, Does it Address the Needs of Human and Animal Health and Welfare? (Plenary Session)  
- Prof Abdul Latif Ibrahim (Malaysia)  
Graduate Training in Veterinary Education Within the Commonwealth, Options and Opportunities to Maximise Contributions to Health and Welfare. (Plenary Session)  
- Prof E J L Soulsby (UK) |
| 10.00 - 10.30 | Morning Tea                                                          |                                             |
| 10.30 - 12.00 | WORKSHOP 1                                                           | Reciprocal Recognition of Degrees  
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Regional Post Graduate Training Courses |
12.00 – 1.30 Lunch

**SIMULTANEOUS SESSIONS**

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<td>Saving the Black Rhino – Veterinary problems associated with capture and translocation</td>
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**Friday 14 September 1990**

AM Adoption of resolutions and recommendations

PM Close of Conference
For further Information contact

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Campylobacter infection. However, control can be aided by our knowledge that they do not survive well with long exposure to the environment outside the hosts, and that they can be eliminated by heat, drying, aeration and long storage at 25°C. They are also sensitive to salts and acidic conditions. Monitoring poultry flocks for campylobacters and developing effective strategies to eliminate Campylobacter in broiler farms and plants is not easy, but these are important measures. The Scandinavians are actively pursuing programs to control Campylobacter contamination. Approximately 10% to 30% of broiler farms in Sweden have C. jejuni. Strict animal husbandry and high standards of livestock management and hygiene, including an effective rodent control, is required, since C. jejuni has been shown to spread rapidly among poultry houses within a farm. Studies to apply the Nurmi concept in preventing Campylobacter colonization in chickens have begun in Finland and the United States. Development of reliable and innovative methods to detect thermostable campylobacters would greatly help monitoring at the farm and plant levels. Cross-contamination during slaughter should be avoided as much as possible. As well as strict hygiene in plants, certain interventions such as air chilling with forced ventilation and the use of organic acid washes have shown promise in drastically reducing C. jejuni survival. Proper cooking and pasteurization of foods and hygienic handling practices designed to prevent Salmonella contamination may also prevent Campylobacter contamination at home and in food establishments. Any long-term solution should include an active campaign to increase public and media awareness of the importance of food hygiene, and the development of effective educational materials and tools for use in schools.

— Safety Watch Food-borne disease bulletin - 1990

The new Veterinarian: Detective/scientists?

The new breed of veterinarians are being called veterinary/toxicologists, or veterinary/microbiologists, or veterinary/biochemists and more recently even, veterinary/analysts, according to Dr. Peter Saschenbrecker, chief of chemical hazards, agri-food division of Agriculture Canada.

"Sherlock Holmes and Dr. Watson rolled into one is perhaps the most fitting description of the detective-scientists that today's inspector in the field resembles," he says.

The need for statistical sampling and the rapidly advancing technology in the area of rapid testing have created a need for complex analytical operations, carried out by the veterinarian.

The most recent innovation in rapid testing is especially demanding. This is the "S-O-S" test, or sulfonamides-on-site test that Agriculture Canada is now conducting on a very large scale in meat packing plants across the country.

"In fact, it can safely be said that the federal government has declared an outright war on sulfonamide violations," Dr. Saschenbrecker claims. "We have, within one year, thanks to these rapid tests, increased our volume from 8,000 samples to 60,000 samples—a tremendous increase in coverage and depth, carried out by our new breed of veterinarians."

"There is a whole list of other rapid tests on the horizon, tests that will be conducted on live animals or on slaughtered animals as soon as possible after killing. It will be the job of the inspectors in the field to deal with this large volume of screening."

The most recent test being explored by the health of animals laboratory division in Saskatoon is a test for hormones. This will be conducted for as little as $35—the current cost is $250—resulting in a significant saving to programs within the federal government.

Dr. Saschenbrecker cautions, however, that the surface has only been scratched. Even with the new success of rapid testing for certain herbicides and pesticides we have only a "meagre beginning." The universe of potential hazardous items includes 1,279 agents (some in the vegetable garden), found in 250 commodities, resulting in a possible 319,750 different combinations of potential hazards which all should be evaluated—an impossible task.

(These potential hazards have recently been enumerated by Ag. Canada's Agri-food Safety Division in a 250-page monograph available to veterinarians for the asking).

For that reason, the Agri-food division is now setting priorities for these hazards to determine how best to use the budget available to get the best possible return and coverage.
EAST, CENTRAL & SOUTHERN AFRICA

MEMORIES OF A ZAMBIAN VET STUDENT

It was on a winter afternoon (June) when I received a letter from Dorset offering me an opportunity to see practice for one month. The offer was for the month of September (arranged for me by the Commonwealth Veterinary Association).

After my surgery oral examination about two weeks later I received another letter but this time from the Commonwealth Veterinary Association (CwVA) confirming arrangements that had been made for me to see practice at the Royal Veterinary College (RVC) for the month of August.

I started my vacation practice at the RVC in August as arranged. I was attached to the Farm Animal Practice Teaching Unit (FAPTU) under Mr. Carmicheal (though a Briton, he was born in Mansa, Zambia). Coming from a country where horses are very few, I found it very beneficial to familiarize myself with horses. Some of the most interesting cases I came across were lameness cases, though hard for a student like me to diagnose, with the aid I got from Mr. Carmicheal, I should think I can blow a trumpet for myself that I easily caught up. At times I would find my way out of the FAPTU to the large animal clinic to observe cases again specifically interested in horses. At this clinic some interesting cases I came across were navicular lameness, cryptorchidism operations and ophthalmological cases of which I had not seen alot at home and also anaesthetising horses.

Mr. King of FAPTU (though now no longer there) had made arrangements for me to be attending to some theatre operations at the small animal clinic. I really appreciate the efforts that Mr. R. Abercromby made to teach me some techniques in orthopaedics. The most interesting case I ever came across was a rottweiler which had a compound fractured distal humerus. You will be surprised to learn that the following techniques were done on that humerus, screwing, wiring pinning and external fixation. What more, really, could Mr. R. Abercromby do, this was the most successful operation I

Attending a case of foetal membrane retention
ever experienced at the RVC.

My social highlights at the RVC were meeting Professor David Noakes an obstetrician I have read about and also used his textbook ‘Veterinary Obstetrics’. I can not fail to make mention of my meeting Dr. Kathy Clark an anaesthetist. A lady of authority in the field. It was nice sharing some experience with her after reading her book, ‘Veterinary Anaesthesia’.

The real field experience was when I went to Dorset where I worked under Messers David Gething (once lived in Zambia from 1968-76), Mahew Brown with and Terry Girling. This was by far the most challenging time I have ever had as a Vet Student. To prove that the Zambian students are worthy recognizing was not an easy burden to carry. I hope I proved it. The most interesting case I came across here was a hypothyroidism dog. Skin samples were taken for bacteriology only to come out negative for any bacteria, hyphae and mange. It was Mr. T. Girling and I who carried out a thyroid function test which revealed that the dog was a hypothyroidism case. I hope the dog is doing fine as it is a long term therapy (I am still following the case through Mr. Girling). I also came across two cases of Bovine Spongiform Encephalopathy (BSE). Cases like Hypocalcaemia, pregnancy diagnosis, lameness, spaying, to mention a few were the order of the day. During my stay I was privileged to have been invited by the President of CwVA, Mr. Trevor Blackburn. I paid him a short visit. The most important thing is that he spared some precious time for me. He also arranged a tour for me at the Cambridge Veterinary School.

Facts I came to find out were my surgery external examiner Dr. Grimes was Mr. Gething's classmate. professor Noakes was a senior student to the above two and was a lecturer to one of my current lecturers, Dr. Tim Ayliffe. Dr. grimes my examiner saw practice under supervision of Mr. Carmicheal. These facts lead to calling myself as a Vet son of Mr. Gething, Vet nephew of Dr. Grimes and a Vet grandson of Mr. Carmicheal.

I would like to encourage my fellow students to make efforts to see practice in other Commonwealth countries through our regional Presidents. Let us utilize the foundation they have laid for us.

Lastly, I would like to thank Mr. Faustin Banda, Mr. D. Gething, Mr. T. Blackburn, Miss Helen Cotton, the CWVA and FAPTU, (RVC) for all the interest, encouragement, support they offered me. “I will live to support the CWVA”

Almond Casimir M. Stilma
Samora Machel School of Veterinary Medicine.
The University of Zambia.

AIDS IS SPREADING

AIDS - Acquired Immune Deficiency Syndrome - is spreading far beyond the borders of the U.S. where it was discovered ten years ago.

The number of AIDS cases reported to the World Health Organization exceeded 500,000 by the middle of 1989 and may reach one million by 1993.

The number of people carrying the HIV virus which causes AIDS, now put between five and ten million, is likely to touch 20 million by 2000, according to WHO. About 155 countries report to WHO on AIDS.

The United States remains by far the worst affected by the disease with 100,000 cases. More than 3,000 new cases were recorded in other areas, mainly Africa and Western Europe.
Over the past decade the population of the African elephant, the largest surviving land-based mammal, has more than halved from 1.5 million to less than 700,000. At this rate the African elephant may well be extinct by the year 2010. Last week, 92 member-nations of the Convention on International Trade in Endangered Species (CITES) took a controversial decision to ban international trade in ivory — the prize which underlies the decline in Africa's elephant population. Supporters of a controlled ivory trade rather than a total ban have argued with some reason that a ban will only drive the trade underground, sharply raise ivory prices and make poaching even more attractive than at present. Zimbabwe and Botswana, pointing out that through "management measures" (supervision and culling of herds) they have been able to keep the elephant population stable and, at the same time, earn badly needed export revenue.

The success of the CITES ban will depend on three factors: a revolution against purchase of ivory products in the wealthy nations, Japan adhering to its no-import decision and international funding of anti-poaching operations. A similar ban on trade in the skin of the spotted leopard has worked well because of the conservationists' successful campaign against purchase of leopard-skin coats and jackets. On the other hand, the ban on trade in the black rhino's horn has not removed the threat of extinction because of the deeply rooted belief in the horn's value as an aphrodisiac. Japan has extended conditional support to the CITES decision. As Japan is the largest market for ivory, its conduct after the depletion of its present stocks (estimated at more than a year's requirement) will be crucial. Finally, anti-poaching operations in Africa's expences are expensive. The estimated $100 million required every year for such operations should be funded by the rich nations of the world. After all, it is their craving for ivory that has brought about the present situation. The African elephant has to be saved not because it is a grand sight to the human eye. It plays a key role in preserving the plant and animal life of Africa by spreading seeds and digging up shallow underwater pools. Some even claim that its extinction will have a domino-like effect on other animal species. India has supported the CITES decision. Trade in Indian ivory has been banned since 1986. Another welcome decision taken by the Centre recently is to refuse the States permission to sell their old stocks of ivory. Such permission is certain to encourage poaching as the ivory can then be passed off as old stock. The 2,000-old ivory craftsmen have no doubt been hit by the 1986 ban. A shift to carving of sandalwood and camel bones has made up a part of the loss in income.

8th Tanzania Veterinary Association Scientific Conference

The Tanzania Veterinary Association is to hold its 8th Scientific Conference at Arusha International conference Centre from 4th to 6th December, 1990.

The theme of the conference shall be "LIVESTOCK AND THE ENVIRONMENT". This theme has been chosen so as to discuss the place of livestock in relation to the environment which has now become an issue of concern not only to the Government but to the Pastoralists and the Environmentalists as well. The conference is expected to attract participants from sister organisations from within and outside the SADCC countries as well as International Research Organisations and Pharmaceutical Companies. The conference shall also bring together Animal Scientists, Livestock Economists, Rural Sociologists, Environmentalists, Extension and Research workers in addition to Veterinarians.

Tanzania Veterinary Association has invited papers and those wishing to present papers: their abstracts should be submitted to the Chairman, Tanzania Veterinary Association NOT later than 30th, September, 1990.

It is with our passions as it is with fire and water, they are good servants, but bad masters.

— Sir Roger L'estrange
UGANDA

LIVESTOCK SERVICES PROJECT PRE-IMPLEMENTATION

1. In the period following project preparation, until project implementation starts, the UVA would establish the basis management systems for implementing the Veterinary Privatisation and Training Project, and collect and collate further detailed information necessary for decisions on private veterinary practice viability. This work would be conducted under some form of pre-implementation financing and would require the UVA to prepare detailed profiles on each potential practice area covering:

(a) Livestock numbers (type, breed, herd/stock size, production systems and management systems);

(b) Livestock raisers, farm managers and livestock farm/stock owners in respect of: the numbers, sizes, categories and locations of the livestock production units they manage; their occupations rather than with livestock; their incomes derived from livestock and other sources; their facilities for handling livestock; their education levels and likely acceptance rates of different livestock management systems, including the use of private veterinary services; and their livestock development plans, and the influence of previous bad experience;

(c) Physical infrastructure including: roads and road condition; transportation, freight and public bus routes and regularity, air strips, etc.; communications by telephone, radio, postal and courier services; and electricity;

(d) Established veterinary services and veterinary product suppliers in respect of: the extent of services and range of supplies; their facilities; the qualifications and experience of those providing the services; source of supplies; and prices and margins charged.

(e) Services available and their costs including: water and electricity; transporation and communications; builders, painters, plumbers, electricians; motorcycle and vehicle servicing, fuel; housing and rentals; medical facilities; and others.

2. From this basic information, as well as what can be derived from the EEC-supported self-employed veterinary pilot project, UVA would prepare a number of financial models of potential private veterinary practices.

3. UVA would also collect and prepare the information needed to assist the Bank of Uganda and the commercial banks in further developing the Credit Guarantee Scheme.

4. UVA staff would prepare procedures and implementation details for the veterinary privatisation credit lines, and establish the basis for future negotiations.

5. In consultation with the Direct or Exchange Control Division of the Bank of Uganda, other involved sections of the Ministry of Finance, and MSIF, UVA would prepare the modus operandi for arranging foreign exchange for the procurement of veterinary products.

6. With the legal and accounting consultant, UVA would review the various organisational and legal alternatives for:

(a) the privatisation of the operations and management of the veterinary clinics and field and diagnostic services of the Veterinary Faculty;

(b) the privatisation of Animal Health Research Centre’s veterinary diagnostic services by the Centre’s staff; and

(c) the establishment of the veterinary product wholesaler primarily owned and wholly controlled by the UVA Co-operative Society.

7. UVA would initiate negotiations with the Ministry of Animal Industry and Fisheries and other relevant Government bodies on the conditions by which Government-employed Veterinarians and Para-Veterinarians would leave the Ministry to enter private veterinary practice. UVA would also address the issue of unfair competition from Government-employed Veterinarians working in private practice areas, or on any other matters affecting the transfer of veterinary services to the private sector.

8. UVA would initiate the design and preparation of the major farmer promotion and extension programmes on private veterinary services.

9. In close collaboration with the Veterinary and Agricultural Faculties of Makerere University, UVA would prepare curricula and practical programmes for retraining Veterinarians who are about to enter private practice. UVA would also prepare guidelines for a national veterinary postgraduate training programme for both Government-employed and private Veterinarians.

10. The Veterinary Practitioner Chapter or equivalent would be established within the UVA as a specialist professional group whose minimum membership requirements would be acceptable as an appropriate professional qualification for Veterinarians in private veterinary practice.

11. UVA would prepare the guidelines and Terms of Reference for the employment of the legal, financial and business advisers, and the various consultants in veterinary administration, veterinary product wholesaling, professional and small business credit, and promotion and extension methods.

12. UVA would make the necessary arrangements to employ those advisers and consultants who would be required during the project pre-implementation period.
Establishment of Private Veterinary Practice in Uganda

1. Background and Introduction

The need for private Veterinary Practice in Uganda was first seriously discussed during the 1970 Annual Departmental Conference of the Department of Veterinary Services and Animal Industry. At the Conference a paper entitled "Prospects for Young Veterinary Graduates", was presented by Dr. G. Mukembo then himself a young graduate. It was noted that Uganda by 1968 already had forty six (46) Veterinarians and 32 of whom were Ugandans all under the employment of the Department. It was feared that automatic Government employment was likely to flood in future. Prospects in other related spheres were examined. Future graduates were advised to consider setting up private practice rather than think of Government services only. The conference however noted that young graduates lacked the capital necessary for a viable private practice.

In recent years the Uganda Veterinary Association opened debate on this subject. The idea reached the Agricultural Task Force of the Country's Agricultural Policy Committee which subsequently made recommendations for its implementations. The implementation strategies were debated by the Uganda Veterinary Association during its Annual Conferences in 1988 and 1989. It was realised that Government Veterinary Services were deteriorating alarmingly. Unlike other East and Southern African Countries, Uganda had no tradition of Private Veterinary Practice. Veterinary Services to the livestock industry have always been provided by the Government. This had been very effective and played a very big role in the rapid development of the industry until late '70. However that rapid development could not be sustained. Because of our political instability and perpetual internal wars of recent years, there has been a gradual breakdown of the improved livestock services followed by a sharp drop in Government resources to the industry.

While veterinary staff numbers have been increasing, their salaries and allowances have been decreasing in real terms. In most cases field allowances are never paid. Although vehicles for field operations may be available, there have been no adequate funds for their maintenance and operations. It is therefore little wonder that major disease and production problems are becoming a major constraint to the rehabilitation of the industry. It is the conviction of UVA that Veterinary practice will provide some solutions to some of the problems. It is expected that private practice will gradually replace government veterinary services beginning with high producing areas. In each practice area, an agreement will be signed with government regarding those activities that will be performed by government veterinarians and those by practitioners. This will be necessary to avoid unfair competition.

2. The Proposed set up

Veterinary Private Practice Program is a component of the livestock services Project to be financed by the I.D.A. loan of the World Bank. The Livestock Services Project preparation Team reviewed the status of animal disease control, testetselfy infestation, provision of veterinary services, milk collection, processing and distribution and forage development in Uganda. The main constraints to production were identified and national strategies and programs developed to mitigate or remove those constraints. Implementation of these strategies and programs form the basis of the Livestock Services Project and hence the Veterinary Privatisation Program.

Through the intermediary of a Commercial Bank, credit would be made available to the intending practitioner. Terms and agreement between Government of Uganda, Uganda Veterinary Association and the participating Commercial Bank. It is expected that the proceeds of the loan would be used to finance the following for each applicant:

- transport
- pharmaceuticals
- equipment
- cold storage
- office rental and housing and some working capital.

The size of the loan will vary according to individual requirements but will be in the region of U.S. $ 20,000 – twenty thousand – per applicant. The project is to run for some six (6) years and during the 1st year of operation, it is expected that about twenty (20) applications will be processed and approved.

3. Supporting Programs

In order to sustain and improve private veterinary services to be established under both the World Bank Project and the EEC Pilot Scheme, a number of supportive programs are being undertaken:

a) Upgrading private Practice Skills

The Veterinarians who are to go into private practice will undergo tailored training programs to update their skills. Short but intensive courses will be conducted at the Faculty of Veterinary Medicine, Makerere University. There is already an on going program of continuing education financed under the UNDP technical assistance and it will form the basis of our program. A lot of emphasis will be laid on clinical and surgical skills, internal parasitism, tickborne diseases, Reproduction and Reproductive disease and Animal Nutrition.
Mobilisation of Veterinarians in the field to appreciate the need for private practice, mobilisation of farmers to realise the value of livestock and commercialise their livestock enterprises, constant consultations with government to ensure its support both morally and legislatively; regular discussions with Central Bank officials and Commercial Bank Officials in formulating the necessary modalities for operating the loan.

In order to carry out its heavy responsibility effectively, UVA Executive has been appropriately strengthened. The project has supplied it with a vehicle. This has enabled the Executive to meet most of the Association members in the field at regional level throughout the country. The Executive is now establishing a full-pledged secretariat with the necessary office equipment supplied by the project.

Initially the project Manager, Secretary and two supporting staff will be remunerated by the Project. In order to give due recognition to the immense importance of the project, the Executive has appointed a subcommittee from among its members to handle exclusively matters concerning private veterinary practice in Uganda.

The Subcommittee is composed of a Chairman and two members. As part of learning about private practice from those who are actually engaged in the business, some visits to appropriate overseas countries are being arranged through finance is the greatest limiting factor. The first visit will coincide with the Pan-Commonwealth Veterinary Conference in Harare in September this year. It is hoped that the UVA delegation to the Conference will tour private practices in Zimbabwe a week before the conference starts.

The project also provides UVA with funds to hire consultants and advisors in various fields in order to consolidate its management systems and also upgrade various legislations in line with the general spirit of private practice.

The following consultants would be engaged appropriately: Legal advisors, financial advisor, Business advisor, Veterinary Administrative consultant, Credit consultant, promotion and extensions consultant.

The European Economic Community Pilot Scheme on Private Veterinary Practice.

As part of Pan African Rinderpest Campaign which aims at Rinderpest eradication over a 10 year period, EEC is funding a project on Rinderpest control in conjunction with Government of Uganda.

Under this project, EEC will fund a pilot scheme to support Veterinarians who wish to set up private practice. The project will provide funds to about twenty veterinarians over a period of two years. The exercise will be introduced in close collaboration with Uganda Veterinary Association. A special line of credit will be established with the Uganda Commercial Bank. A special Committee will be established in order to discuss and approve on a case by case basis the credit contracts foreseen under the pilot scheme for private veterinarians. The committee will be composed of Ministry of Animal Industry and Fisheries, Uganda Commercial Bank, the EEC Delegation and Uganda Veterinary Association. The monitoring of the approved credit contracts will be the responsibility of UVA.

The project will also provide funds for the strengthening of UVA management. This will include supply of office equipment and stationery, journals and some operational capital.

The World Bank Project and EEC Pilot Scheme will be complimentary to each other. UVA will run both projects as an integrated scheme with separate books of account.

The EEC Project will be operational shortly.
BRITISH VETERINARY NURSING ASSOCIATION

The Commonwealth Veterinary Association has received a letter from Mrs. Lorraine Cope, BVNA Secretary, which is reproduced here for those interested in joining the BVNA and also for those who are interested to establish mutual relationship between similar organisations in other Commonwealth countries.

The British Veterinary Nursing Association

Dear Sir/Madam,

I am writing to you on behalf of The British Veterinary Nursing Association whose major aims are as follows:

1. To promote and foster the highest standard of Veterinary Nursing.

2. To provide advice and assistance to Veterinary Nurses, Veterinary Nursing trainees and other Veterinary lay staff.

3. To provide help and advice to those wishing to make Veterinary Nursing their career.

We wish to provide a stronger link with fellow Veterinary Nurses/Technicians, other veterinary lay staff and Associations similar to our own.

Benefits would include:

1. Education — the exchange of information and ideas I. E. Veterinary Nursing techniques.

2. Interest — How Veterinary Nursing differs internationally and if our colleagues abroad are able to take further qualifications.

3. Opportunities — The provision of contacts for those wishing to work in Britain and for those in Britain wishing to work overseas (both permanently and temporary I. E. work exchanges)

I would appreciate any information that you could provide relating to Veterinary Nursing in your country, for example:-

Do you have a body equivalent of BVNA?

What is the format of Veterinary Nursing training?

Can you provide information and advice for those who are interested in working in your country or do you know where this information can be found?

I look forward to hearing from you, we hope you can support us in our wish to establish Worldwide links.

Yours sincerely,

Lorraine Cope VN (Mrs.)
BVNA Secretary

BRITISH VETERINARY NURSING ASSOCIATION

What is BVNA?

BVNA is an Association for qualified Veterinary Nurses (formerly RANAS), trainees, those working in veterinary practice or allied professions and supporters.

When formed in 1965, the Association’s aim was “To foster and promote the standard of veterinary nursing and the interest and status of the veterinary nurse”. This has not changed.

Why join BVNA?

As a member you receive our Journal which is published every two months. It contains scientific papers, details of meetings and continuing education courses, letters and articles of interest. In addition you will be able to attend your Regional Branch meetings and our Annual Congress at considerably reduced rates. As the only Association specifically for veterinary nurses, membership of BVNA will ensure your ideas and views are represented within the veterinary profession.

Members promote the exchange of ideas and experiences, discuss developments in veterinary nursing and receive information on important issues such as wages and conditions of employment. They are also encouraged to consult Council members for professional advice.

When you apply for membership, your form and remittance go to Lorraine Cope, the Membership Secretary. You should receive an acknowledgement within 14 days. Your application then goes before the next Council meeting (held approximately every 8 weeks) so it may be some time before you receive your membership card. Your subscription is a taxable allowance and so may be entered on your tax form.

Think about membership: it will help keep you in touch with many aspects of your profession. You will find an application form enclosed; don’t worry if you can’t find anyone to propose or second you, this can be done at a Council meeting.

If you have any further queries, please feel free to contact Lorraine at the address below.

We look forward to welcoming you as a new BVNA member.

Lorraine Cope, VN,
Membership Secretary,
The Seedbed Centre
Coldharbour Road
Harlow, Essex CM19 5AF
BVNA January 1987
**Professor Soulsby Created A Life Peer**

Prof. E.J.L. Soulsby, Professor of Animal Pathology and Head of the department of Clinical Veterinary Medicine University of Cambridge has been created a life peer and will sit on the conservative benches in the House of Lords. Lord Soulsby is the first Veterinarian to be made a member of the House of Lords, and the entire veterinary professors is proud of this achievement.

Lord Soulsby has had a brilliant academic career and has published our 200 papers and published 12 books. He has also contributed chapters in number of books.

Lord Soulsby has also championed the cause of Veterinarian, especially his efforts to save the schools of Cambridge and glasgow from closure are well known.

Lord Soulsby's appointment to the upper chamber has made the profession proud.

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**Grim reminders**

UNICEF annual report, The State of the World's makes grim reading, among its findings:

- Forty thousand children are dying everyday, nearly one every two seconds. Of these, nearly 8000 die because they have not been immunized, 7000 of dehydration caused by diarrhoea and 7000 of pneumonia.

- A hundred million children will die needlessly in the next 10 years.

- 'Death and suffering on this scale is no longer necessary,' says James Grant, executive director of UNICEF. The cost of immunization would be 2.5 billion US dollars—not much more—as much as what US companies are spending on cigarette advertisement.

- A 5% diversion of military spending could provide 50 billion US dollars a year, which is needed to end absolute poverty on the planet within the next 10 years.

- Third World governments are allocating half their spending to armaments and 'debt servicing' at 400 US dollars for every family.

- Only high-level political commitments can put low-cost solutions into practice on the scale needed.

UNICEF is calling a World Summit for Children in September 1990 to discuss these important issues.

Almost without exception the major health threats of today can most effectively be combated by changes in human knowledge and behaviour. The toll they take of children can be at least halved by empowering people with what is already known. At a conference on medical education that aims at shifting the training of doctors away from high technological research to using knowledge already available, the executive director of UNICEF, James Grant, said that he was sceptical about the willingness of medical schools to change. In most schools less than 1% of medical education was devoted to topics listed as community health and health education. Dr. Hiroshi Nakajima told the experts, 'Technology excellence must not be an end in itself for the medical profession.' They reiterated that four million children a year are still dying from diarrhea, much of which can be prevented with such effective and inexpensive treatments as the use of oral rehydration powders.

The report of the United Nations Working Group on slavery looks more like a chamber-of-horrors catalogue than a document. The report says that children are condemned to a wretched and inhuman existence or trained to pursue criminal activities or even utilized for purposes of organ transplants. The International Bureau of children expresses the hope that the working group would examine the question of human foetuses being sold for use in the pharmaceutical and cosmetic industries.

India too has been mentioned in the United Nations subcommission report on human rights. According to it no less than 45 million very young children work in inhuman condition. 'Indian legislation prohibits treating workers as slaves. There is a penalty for it, a fine of Rs. 150.' (1)
GENERAL ARTICLES

Holistic veterinary medicine
A small animal practitioner’s viewpoint

I have practiced companion animal veterinary medicine since 1962. During the last ten years I have integrated an increasing amount of holistic medical philosophy into my practice. I now use very little conventional medicine and concentrate my diagnostic and therapeutic efforts on the holistic approach. Why have I changed my practice philosophy? Holistic medicine offers an increasing scope of treatment — an individuality of patient care and an emphasis on prevention — that conventional medicine cannot express. The conventional approach is usually excellent for the short-term but often fails to grasp the true meaning of disease, often wrestling senselessly with the chronically ill patient. Chronic allergic dermatitis is a classic example. What do you do after you have dispensed steroid and antibiotics repeatedly, performed intradermal or systemic allergy testing, investigated endocrine function, and conducted skin biopsy to find the diagnosis of a chronic inflammatory skin disease? Holistic medicine offers no quick fix for this patient but has much more to offer as a long-term approach.

What is this mystical “holistic” philosophy, and how does it differ from conventional medicine? On the diagnostic side, conventional medicine concentrates on causative agents. The holistic approach is primarily interested in the body’s response or lack of response to an insult. A holistic practitioner may employ all the diagnostic tests and clinical pathological resources available, but the interpretation and implications of these tests will differ from those of the conventional practitioner.

As an example, chronic bacterial otitis externa from a conventional standpoint is looked upon as a persistent bacterial ear infection, and is treated with antibiotics to reduce the numbers of bacteria, and perhaps steroid to reduce the inflammation and pain involved. The holistic approach does not concern itself with the type of bacteria and the type of antibiotic that is going to work, but rather investigates why the body has allowed this to happen in the first place — exploring the lack of immune response from the patient. The ear infection is indicative of an internal upset. The real problem may not be associated with the ear at all. The holistic veterinarian must investigate things other than the obvious.

Lose Humanity and You Lose Everything

Needless to say, I was not a very good husband during that time of my life.

“What is it that you really want?” my wife once cried in desperation one night.

“A million bucks,” I told her.

“Then what will you do?” she wanted to know.

“I’ll start living,” I replied with no hesitation at all.

Some men have to have a heart attack before they suddenly realise they must change or they will lose everything. For me it was the shocked look on my wife’s face. She didn’t say anything as she stood across from me. There were moments, horrifying epiphanies, when no words were needed.

In the end it was not as hard to get out of the business and find a new career as I had thought. I’ve spent several years now rediscovering the real world. I’ve done a lot of searching back too, to try to learn when and why I decided material success was worth paying any cost to achieve.

Life is so short and precarious that we are fools if we do not constantly examine the meaning of our harried days. Few people are every satisfied with their success, no matter how grand. You never really “make it” because your goals keep reaching ahead of you. And if in trying you lose love and your humanity, then you’ve lost it all.

From The Secrets Men Keep by Ken Druck — Ballantine, New York.
— an approach to the entire patient — looking at the digestive system. All of these, in combination or separately, may be playing an integral part in the problems that we are confronted with. If possible, the holistic practitioner does not suppress the immune response with steroids or even pain relievers, but prefers to use the presenting problem as a diagnostic benchmark for assessment of therapy.

The conventional practitioner reduces the diagnosis to a labelled simple disease entity such as ulcers external and he therapy is likewise reduced to a simple medication. Seldom does conventional medicine address why the infection has occurred in the first place. The holistic veterinarian must try to determine the true reason for the infection to determine how to permanently prevent recurrence. This must involve a comprehensive examination of the patient’s history, along with a careful examination of the entire body. A good client liaison is essential both for diagnosis and therapy. It is obvious that not every pet owner makes a good candidate for the holistic approach to their pet’s problems.

The holistic approach is primarily interested in the body’s response or lack of response to an insult

On the therapeutic side, the gulf between the conventional practitioner and the holistic philosophy widens. The conventional practitioner generally imposes medication to nullify clinical signs. This is usually accomplished with invasive drugs that either destroy the offending organism or alter body chemistry such that the effects of the offending invaders are lessened. The holistic practitioner, on the other hand, is patient-oriented and attempts to stimulate the body to repair itself. The emphasis is on encouraging the patient’s defence mechanisms. The holistic veterinarian attempts to provide the body with an optimal nutritional status to facilitate maximal patient response. This approach does not always have the quick dramatic beneficial effects that the conventional approach appears to have. But the holistic approach modifies the body in a very positive way, not only eventually correcting the apparent problems, but ensuring continued patient health.

The avoidance of invasive medications frees the holistic practitioner from any of the iatrogenic problems so common in modern clinical medicine. The holistic therapeutic regimes have no side-effects, creating effective changes in the patient while not creating new problems to compromise the patient’s ability to recover.

The holistic therapeutic tools

Holistic practitioners have the freedom to concentrate on a specific or a multifaceted approach to therapy. I have incorporated four “tools” into my holistic practice. There are holistic colleagues who specialize in one modality, and others who use a more varied approach than I choose to employ. It is this freedom to apply vastly different types of treatments that makes holistic medicine so interesting and provides a therapeutic scope that never seems to end. My treatment regime includes orthomolecular, homeopathic, acupuncture, and chiropractic approaches.

1. Orthomolecular medicine — This therapy involves the use of vitamins, minerals, amino acids, fatty acids, enzymes, coenzymes, and glandular concentrates in therapeutic doses to provide the patient with optimal nutritional status at the cellular level. Individual patient deviation from the optimum can be corrected with mineral and accessory factor supplementation. The precise tissue levels of minerals can be determined with atomic emission spectrophotometry. The scope of this field is vast — the interaction of the patient’s individual biochemistry and nutritional status can be monitored and changed dramatically with knowledgeable supplementation. The use of this approach is not only rewarding to the patient but opens up new vistas for patient wellness assessment and therapy. It is my personal conviction that optimal nutritional status should be our primary goal as healers. If this were achieved, then there would be little need for other medications or procedures. Patient individuality and lack of orthomolecular nutritional diagnostic interpretation abilities is a limiting factor in achieving the utopian world where preventing disease supplants the need for “therapy”. On a day-to-day basis, orthomolecular medicine is a primary tool for all of my treatments both as preventive and corrective therapy.

2. Homeopathy — Homeopathic medications are used much more widely outside of North America than within. These are natural substances, of plant origin such as arnica or bella-donna, mineral sources such as cuprum metallicum and kali phosphoricum, or “animal” origin such as apis mellifica and lachesis. They are diluted and “potentized” through succession to exacting standards and are regulated according to strict pharmacological principles. When employed properly, they can cause significant therapeutic changes in body biochemistry. The “remedies”, as they are called, stimulate the body’s immune system in specific ways. There are over 1,000 of these remedies to choose from, and there is an individual patient’s reaction to assess in each application. The computer has been a tremendous asset in helping to analyze the vast amount of information available on the choice and use of these medications. This is often an intimidating field of medicine, but one that I find not only effective but challenging in everyday clinical practice.
3. **Acupuncture** — Meridian Therapy
   Acupuncture, like homeopathic remedies, stimulates the immune system by altering the bioenergetic fields which modulate the body's activity. Electro-magnetic energy tracks (called meridians) flow throughout our patient's bodies. It is the stimulation or sedation of these meridians that can be used as diagnostic and therapeutic tools by the practitioner. These meridians have been investigated carefully for our companion and other domestic animals. The methods of stimulation or sedation can be varied — needles, pressure, laser, light, or electrical. I employ acupuncture daily as a useful adjunct to other therapeutic tools stimulating my patients into improved health.

4. **Chiropractic** — The practice of manipulating the spine and other parts of the musculoskeletal system to bring the body into harmony has been employed for many years. Illness creates body imbalance. Nowhere is this more evident than in the spinal column and adjacent structures. These imbalances can be effectively corrected manually with appropriate physical adjustment. We have much to learn about how valuable this can be in veterinary practice. I am employing more and more effort to make this an integrated part of my holistic program for creating patient wellness.

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**The patient itself is the only one who can cure — the best we can do is to stimulate or provide an environment conducive to healing or preventing disease.**

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**My holistic approach**

When I am confronted with a chronic case of any type, I determine why the patient is "out of whack." I don't look for just the presenting signs or presumed symptoms, but I try to get an overall view of nutritional or hormonal reasons for the patient's system to be biochemically unbalanced. I assess the digestive system with a detailed history along with laboratory data. Enzyme, protein and fat digestive tests are used, indican production is ascertained, and radiography and biopsy results are reviewed if required. I judge his/her own individual ability to assimilate nutrients and explore what is being provided for consumption and how it is being processed. I gauge the pet's immune status by investigating clinical chemistry results along with stress-related tissue mineral levels. I evaluate the patient's history relating to what invasive medications or devastating conditions have depressed the body's defence system. I also review, with the owner's help, the apparent mental state of the patient and determine what physical and psychological environmental influences are important in judging the total health status over the last several months. I try to involve the pet's owner in every aspect of my investigation — he/she is my number one ally and an absolute necessity for the success of my therapy.

Holistic medical approaches are not for everyone. Those of us who advocate this approach sometimes appear to be antagonistic to our conventional colleagues. This is only because of the basic philosophical differences, and should not be overreacted to. I employ conventional medicines in my day-to-day practice. There are times when antibiotics and even steroids have a role to play. Where possible, I prefer using the holistic philosophy. Nurturing the patient to heal itself and guiding the pet owner into providing an environment that will ensure continuing health is much more satisfying than the problem-oriented conventional therapy that is often only effective at repairing the tip of the iceberg. Holistic medical approaches work — extremely well! As my practice clientele changes (or alter the attitudes of my clients), I am able to get the type of cooperation needed for this approach. We must constantly remind ourselves of the fact that, as veterinarians (holistic or conventional), we never cure any of our patients. The patient itself is the only one who can cure — the best we can do is to stimulate or provide an environment conducive to healing or preventing disease. To me, this is what holistic medicine is all about.

**Sources of additional information**

1. **International Veterinary Acupuncture Society (IVAS)**
   Dr. Meredith Snader
   R.D. 4
   Box 216
   Chester Springs, Pennsylvania
   19425
   1-215-827-7742

2. **American Holistic Veterinary Medical Association**
   Carvel G. Tiepert, DVM, Executive Director,
   2214 Old Emmorton Road
   Bel Air, Maryland 21014
   1-301-838-7778

3. **International Association for Veterinary Homeopathy**
   Dr. Jan van der Heul
   Beststraat 7, 9501 HV Stadska
   naal, Netherlands

4. **OMC and Canadian Holistic Medical Association**
   Zoltan P. Rona, MD, MSC
   700 Bay Street
   Suite 604
   Box 101
   Toronto, Ontario M5G 1Z6

This invited commentary is based on a recent talk given by Dr. McCutcheon to the Holistic Health Club at the Ontario Veterinary College — MGM

Introduction

Through country memberships, the World Veterinary Association represents some 125,000 veterinarians around the world. With the addition of specialists from associate memberships, it is truly a formidable resource. Given that the goals of the Association include improvement of veterinary education and promotion of veterinary science, is the association doing all that it could globally to make best use of this resource?

The world has been growing smaller since 1905, when the association was first formed. At that time the idea of a global community would have seemed strange to most; today, it is recognized by all that the progress and stability of all countries are inextricably linked. Yet, we see the economic gap between developed and developing countries widening. Despite all of the technological advances made in the world, many countries lack the basic techniques in disease control and eradication and in food production, processing and distribution.

Many members of the WVA are concerned by the obvious need in the poorest countries for access to expertise and training in all fields of veterinary science.

Sometimes, small but well-planned inputs can have a disproportionately large effect in leading to improved disease control, food production, food processing or storage. Although many veterinarians could offer these inputs, there exists no easy and practical means for them to do so.

The following outlines a program which the WVA could establish at minimal cost, matching interested veterinarians and schools with developing countries’ needs and leading ultimately to improved veterinary services worldwide.

It should not duplicate programs of other international organizations.

Proposal

That the World Veterinary Association establish a pool of interested members available for assignments at home or abroad, and undertake to match these members with requests for aid from developing countries or from international organizations.

Step 1: Establish a Resource Base

The membership would be solicited and interested members invited to submit application to participate as volunteer consultants and trainers.

Volunteer consultants would participate on the basis of payment of travel and living expenses during the assignment; no fees would be offered. Trainers would participate in their own countries on the basis of payment of direct costs.

Assignments would be for up to 3 months duration. Volunteers should indicate the maximum time available per assignment and the number of assignments he/she would be willing to accept per year.

Step 2: Establish an Administrative Office

Costs for administering the program can be kept to a minimum. The Association would need to hire one full-time
programme administrator, who would have the following duties:

— mail out applications;
— establish a computerized inventory of volunteers by specialty, areas of interest and indicating language abilities;
— solicit funding;
— administer funds;
— receive and review applications for assistance from developing countries, ensuring they meet program guidelines and objectives;
— match these with volunteers and solicit volunteers to accept the assignment;
— present applications to the Steering Committee for approval, when necessary;
— make travel arrangements;
— follow-up on assignments to ensure they were carried out satisfactorily.

The administrator would be responsible for keeping the Steering Committee informed of activities and preparing regular reports.

Administrative costs could be limited to one office the full-time administrator, a computer, part-time secretarial services, and travel costs for a Steering Committee.

Step 3: Steering Committee

A Steering Committee for the programme should be established. It is recommended that it contain 3 to 5 association members, and that the programme administrator serve as Committee Secretary. The Steering Committee would need to meet several times in the first year, and the Chairman of the Committee should be prepared to become involved in fund raising, at least initially. Once the programme is established, it is envisaged that the Steering Committee should meet twice a year, to review activities, to give general guidance on the programme and to approve an annual report to the WVA.

Step 4: Application for Assistance

A description of the programme and the type of assignments which would be accepted should be sent to developing countries. This can be done through the WVA to member developing countries, but it should also be done through international organizations, particularly the FAO and WHO.

Volunteer consultants would be available to give expert advice, training, and to provide technical inputs to assist developing countries to improve livestock production, with emphasis on establishment of national veterinary programs. Specific activities might include:

— advice on design of inspection systems and diagnosis services;
— assistance in program and project planning for national veterinary services;
— management assistance for national veterinary services;
— program and project preparation and evaluation;
— program implementation supervision;
— design of training courses and meetings;
— assistance in organization of International Veterinary Association meetings;
— presentation of short-term courses in specific techniques to laboratory staff, inspectors, farmers, etc.
— project management;
— evaluation of research;
— research support to laboratories;
— design and assistance of wildlife management/protection programs.

In addition to individual developing country governments, the pool would be available for access by international organizations or non-government organizations and aid agencies.

The program should also arrange short-term training programs for developing country veterinarians in institutions, laboratories, colleges and with individuals in order to address specific problems.

Countries presenting requests would be prepared to pay in-country local costs of the consultant (meals, housing, local travel and translation services, if necessary); funds for international travel and other direct costs to the consultant would be raised by the WVA.

In the case of training in other countries, the requesting country should cover airfare and living allowance for the trainee; the WVA should cover such direct costs as laboratory supplies, etc.

In the case of requests from international organizations such as FAO, CIDA, USAID, etc., all costs including international travel and operational funds would be paid by the international organization.

Requests from developing countries should include the following:

— indication of the financier and co-founder and local institution responsible for the project;
— a description of the project includ-
ing its expected effect;
— background on the country's available veterinary services and why assistance is being requested;
— a precise description of the consultant's duties including terms of reference, length and location of assignment and requested dates;
— name, address, telephone and telex number for a contact person for both the WVA and the consultant;
— indication of local costs to be covered (where the volunteer will be housed, how will travel, locally, etc.).

Volunteer consultants should not be requested for assignments of more than 3 months.

Note 1:
The WVA could consider in future a pool of those available for longer assignments but it is felt these assignments would naturally have to include payment of fees and the question of fee scales, moving costs, etc., could become complex. It is recommended this be considered once the present program is well-established.

Note 2:
In researching this plan, it was suggested to the consultant that another way in which the WVA could usefully contribute to developing countries was through the collection and distribution of documentation; that members with extra copies of papers, journals, text, etc., donate them for redistribution to developing country laboratories, research centers and technical libraries. Lack of access to technical literature is a continuing, severe limitation in many countries.

This activity has not been budgeted for in the present plan, but could be easily coordinated by the same administrative office, if a funding source could be found to cover storage, crating and shipping costs.

Step 5:
Funding
On the basis of a program as outlined above, after initial set-up costs to the WVA for purchase of furnishings, a computer, etc., a small but active program with up to 50 assignments per year could be run on an annual budget of $250,000 U.S. Many additional assignments would increase the budget because of volunteer travel costs, estimated for these budgeting purposes at $4,000 per assignment. It is likely that funds for the total budget could be raised from international aid organizations. It is well recognized throughout the aid community that a lack of qualified professional veterinarians is a serious limiting factor to development in the poorer countries. Internationally there is a move toward more and more funding to professional associations to run their aid programs. Developed countries with well-established aid programs, such as the US, Japan, Britain, Sweden, Canada and EEC members, should be approached for contributions, as well as multilateral organizations such as the FAO, WHO and UNDP.

Although some start-up funds might be available from international aid agencies, the WVA itself should be prepared to commit some funds from member country contributions, because level of contributions from aid organizations may be dependent on an indication of the number and availability of volunteer consultants and the seriousness of the WVA in pursuing this venture. Therefore an initial call to the membership at large may be required before further fundraising takes place.

Policy Statement on Animal Welfare, Well-being and Ethology

The W.V.A., knowing that the veterinary profession it represents is the only qualified group of specialists able to both diagnose and license to treat, diagnosed, suffering and distressed animals, as well as apply all possible preventive measures, has decided to claim its rightful place as the leading authority in the field of Animal Ethology, Welfare and Well-being.

World Veterinary Association Draft Policy Statement on Animal Welfare

Introduction
1. The World Veterinary Association (WVA) accepts the primacy of the veterinary profession in the diagnosis, treatment, control and eradication of disease in animals. It also recognizes its responsibilities in the need to alleviate suffering, pain and distress and the active promotion of animal welfare.

2. The following constitutes the draft WVA policy on animal welfare. This has been considered by the British Veterinary Association Animal Welfare Foundation and suggested amendments have been incorporated.

Animal Welfare
3. The veterinary profession is committed to the scientific study of all aspects of animal welfare. There is a need to know what animal require-
ments can be fulfilled and what harm can be avoided. With this knowledge animals can be cared for in the best manner. Only with optimum management and care (animal welfare) can animals live and produce to their full potential.

4. Man is responsible for the environment and for all species of animals. The veterinary profession is pre-eminent in this work. We do not accept the view that animals have special rights as an entity on their own. We believe that animals can benefit more from the point of view that man is responsible for the provision of animal welfare than from the view which promotes rights alone.

Freedom of Animals

5. It is recognised that certain provisions of care are essential to welfare in the form of five freedoms. These can be stated as follows:

(a) freedom from hunger and thirst
(b) freedom from physical discomfort and pain
(c) freedom from injury and disease
(d) freedom from fear and distress
(e) freedom to conform to essential behaviour patterns

Animal Welfare in Veterinary Education

6. In order to establish an informed position on animal welfare, appropriate to the veterinary profession, it is considered essential to have this subject dealt with in undergraduate education. For this purpose the following principles should be adopted.

(a) The subject of Animal Welfare should be incorporated as a discipline in its own right within the veterinary curriculum.
(b) The overall scientific discipline of Animal Welfare should incorporate applied aspects of ethology, bioethics and the concepts of suffering and well being.
(c) The subject should be given at the preclinical level of veterinary education, although it is recognised that it must have extensions into the clinical level.

7. It is also considered necessary for postgraduate opportunities in education to be available to veterinarians wishing to specialise in animal welfare or ethology.

Animal Experimentation

8. According to our present knowledge in our increasing struggle to control diseases of both humans and animals, we must accept that experimentation with animals, in certain cases, is unavoidable. However, these should be kept to the absolute minimum. Every effort should be made to discover or utilize alternatives to animal experimentation. There should be legislation or administrative measures to cover all institutions where animal experiments are carried out. Experimental animals must be kept under optimal conditions at all times. The experiment should be thoroughly scientifically planned and not unnecessarily duplicated. All animal colonies bred or used for experimentation should be under the control and responsibility of a veterinarian, suitably qualified, and the supply of animals for research should be regulated.

Transport of Animals

9. The movement of animals requires careful control and legislation. Animals should be transported as little as possible and those destined for slaughter should be killed as near to the point of production as possible.

Conservation of Wildlife

10. We endorse all the efforts of veterinarians or others, to conserve our wild animals and protect endangered species. In all aspects of the control, capture, translocations and the housing (if necessary) of wild animals, their welfare and care should be paramount. The veterinary profession accepts responsibility for this work and recognises the need for non-veterinary expert support.

Welfare Legislation

11. We believe that all legislation pertaining to animal health, welfare, and the prevention of cruelty, should be drafted in close co-operation with veterinarians or veterinary associations. We strongly recommend that, in those countries where no Animal Protection Acts have been promulgated, the National Veterinary Associations should initiate such legislation. The transport and slaughter of animals are two particular areas requiring carefully drafted legislation.

The WVA is willing to render all possible help.

Ten New Galaxies

US astronomers have discovered 10 unknown Galaxies, hidden behind the Milky Way, and expect to detect several thousand more in this region of space. The discovery, reported at a meeting of the American Astronomy Society, was made by Mr. Frank Kerr of the University of Maryland, using a radio telescope at Green Bank observatory in West Virginia.
Feline Cushing’s Syndrome


In this retrospective study, hyperadrenocorticism was diagnosed in seven cats with concurrent diabetes mellitus. Four cats had pituitary adenoma and one had pituitary carcinoma with bilateral adrenocortical hyperplasia, one cat had adrenocortical carcinoma, and the remaining cat had adrenocortical adenoma of the left adrenal gland and one year later developed a similar tumour in the right gland. Clinical signs included polyuria and polydipsia (7/7), a pot-bellied appearance (5/7), skin changes (5/7), lethargy (3/7), weight loss (3/7), dyspnoea/panting (2/7), and recurrent bacterial infections on the basis of ACTH stimulation test (3/6) and the dexamethasone suppression test (5/6). Pituitary-dependent hyperadrenocorticism was differentiated from adrenocortical neoplasia on the basis of results of the dexamethasone suppression test (n=4), endogenous ACTH concentration (n=3), results of abdominal radiography and ultrasonography (n=3) and exploratory laparotomy (n=1). Four cats died or were euthanased without treatment attempts. Treatment with mitotane (o,p-DDD) followed by 60Co teletherapy was ineffective in one cat with pituitary adenoma. One cat with pituitary carcinoma died one week after bilateral adrenalectomy. Bilateral adrenalectomy was successful in the cat with bilateral adenomas.

An Alternative to Surgery for Pulmonic Stenosis


The technique of balloon valvuloplasty was performed on two dogs with pulmonic valve stenosis. Immediately peak right ventricular systolic pressure declined from 92 to 44 mm Hg in the first dog and from 108 to 46 mm Hg in the second. The peak systolic pressure gradient across the pulmonic valve declined from 60 to 12 mm Hg in the first dog and from 84 to 22 mm Hg in the second. Haemodynamic improvement was sustained in both dogs at the time of recatheterization three months later. Both dogs tolerated the procedure well and there were no serious complications. The authors conclude that balloon valvuloplasty offers an alternative to surgery for the treatment of valvular pulmonic stenosis in dogs.

Treatment of melanomas in horses


Three horses with progressive, multifocal melanomatoses were treated with cimetidine, an H2 histamine antagonist. In two of the horses the tumours had recently begun to increase rapidly in size and number after first being observed six and 27 months previously, and the other three had been a period of slow development for four years. During the treatment, which lasted for two months to one year, the number and size of the melanomas decreased by 50 to 90 per cent. The progression of the disease has been halted in two of the horses, which have not been treated for 31 and 41 months, and controlled in the other which continues to be treated at a lower dose. The results suggest that cimetidine acts as a therapeutic immunomodulator by suppressing T cells pharmacologically, thus enhancing the T contrasuppressor cell's antitumour influence on macrophage function.
THE CIBA-GEIGY PRIZE FOR RESEARCH IN ANIMAL HEALTH 1989

Dr. T.D. Yilma (47), citizen of the United States of America, is a native of Ethiopia. He attended Jimma Agricultural High School and Haile Selassie I University in Ethiopia. He graduated in Veterinary Medicine (DVM) in 1968, and in Microbiology (Ph.D.) in 1977, both times from Davis. Between 1980 and 1986, he was Professor at the Department of Veterinary Microbiology and Pathology of the Washington State University in Pullman, WA/USA. Since 1986, he is Professor of Virology at the Department of Veterinary Microbiology & Immunology of the University of California in Davis, CA/USA.

His investigations on Rinderpest, a devastating disease of cattle and of great economic importance in Africa and Asia, have led to the development of a novel, recombinant vaccine which exhibits a number of advantages over conventional vaccines employed so far. His new approach raises hopes that the disease can be eradicated or at least better controlled.

Since the sixties a number of international organizations (e.g. FAO, WHO, World Bank, and the EEC) have been involved in an extensive programme aimed at eradicating Rinderpest in Africa. About 120 million cattle were vaccinated in East and West Africa with a conventional vaccine which was produced in tissue culture. After initial success, Rinderpest has become rampant again in Africa due to the failure of sustained surveillance, vaccination, and control measures. The actual cost due to reduced productivity and deaths of livestock in Africa are currently estimated at US$ 500 million per year.

The recombinant vaccine developed by Dr. Yilma and his group is heat-stable, and it is simple to produce and apply. It is therefore ideally suited to the needs of the countries where Rinderpest is epidemic.

Dr. Yilma is a recognized expert in the field of Rinderpest. He collaborates with international organizations (e.g. FAO and WHO), and is a consultant to the US Department of State. The awarding of the Prize of SFR 50,000 is in recognition of his outstanding contribution to the development of a novel, recombinant vaccine, and of the potential practical benefits of his findings to the developing countries.

Anti-Aids Molecule

Scientists of Upjohn Company claim to have designed a molecule that prevent the AIDS virus from reproducing in test tubes — an achievement they say could one day lead to an effective drug to treat the disease. The compound blocks the last stage of the process the AIDS virus uses to reproduce itself in human cells. This stage is one of a number of points in the life cycle of the AIDS virus that researchers have targeted for attack. The report by Upjohn scientists, which appeared in the journal "Science" combined with recent similar results from a team at SmithKline Laboratories gave the first explicit indication that drugs could be specifically designed to interfere with the Human Immunodeficiency Virus (HIV) causing AIDS. The researchers said that they would continue to experiment with their synthetic drug, altering it slightly to test different versions of it in laboratory dishes containing cells infected with HIV — PTI.

Predicting recurrence

Boston (Reuters): Medical researchers seeking to predict if a woman is likely to suffer a relapse of breast cancer have found high levels of the chemical Cathepsin-D in the tumours. High levels of Cathepsin-D were associated with a nearly three-fold rate of recurrence of breast cancer, according to a study. About 150,000 American women a year contract breast cancer. Seventy per cent — those whose tumours do not spread to the lymph nodes — remain free of the disease. But 30 per cent suffer relapses. The research team, led by Atul K Tandon of University of Texas Health Science Centre in San Antonio, found that "Cathepsin-D is a potentially important prognostic factor for early recurrence and death." However, when cancer cells spread to the lymph nodes the Cathepsin-D test could not predict whether the tumour would reappear.

Obesity and Cancer

Avoid obesity, cut down on fat and keep alcohol consumption moderate are among the seven guidelines on nutrition issued by the American Cancer Society to reduce the risk of the disease. The conclusions and guidelines include, — avoid obesity, individual 40 percent and more overweight increase their risk of cancer, cut down on total fat intake, eat high fibre foods, whole grain, cereal, fruits and vegetables, include food rich in vitamin A and C, include cruciferous vegetables like cabbage, broccoli, brussels, spouts, kohlrabi and cauliflower and eat moderately salt-cured, smoked and nitrite-cured foods. — PTI.

Venom anti-coagulants

Two purified venom components from a dangerous snake — King Brown or Mulga snake — may soon be used to treat thrombosis. Queensland University researchers have isolated two molecules in the snake's venom which prevent thrombosis or blood clotting. However, the venom is expensive. The Australian King Brown venom costs $1,000 a gram. The venom research started following an observation by an Australian doctor that blood sometimes would not clot in people bitten by King Brown snakes.
NEW PUBLICATIONS

FINANCIAL AID FOR FIRST DEGREE STUDY AT COMMONWEALTH UNIVERSITIES 1990-92

This is the only guide which brings together details of the small number of awards open to Commonwealth students wishing to study for a first degree at a university in another Commonwealth country. The booklet describes scholarships, bursaries, grants, loans etc offered by governments, universities and other organisations.
 Most of the awards are for students from developing countries. Several government programmes offer financial assistance to their own students for study abroad since suitable facilities do not exist at home. Similarly, a number of schemes provide support for students from small island states without universities. Entrance scholarships and bursaries, offered by many universities to intending undergraduates, are also described.
 There are almost 140 separate entries including:
 Multinational award schemes
 Awards for study abroad offered by government and other sources in student's own country
 Awards for students from abroad offered by sources in country of tenure — Australia, Brunei Darussalam, Canada, Hong Kong, New Zealand, United Kingdom
 Awards for refugee students
 Certain organisations which make awards to registered foreign under-graduates at any university in a particular country or for a mid-course period of study abroad
 Index to awarding organisations and named awards

Format: 229 x 150 mm
ISBN: 0-851-122-4
Extent: 58 pp

AWARDS FOR COMMONWEALTH UNIVERSITY ACADEMIC STAFF 1990-92

This unique directory provides a comprehensive guide to fellowships, visiting professorships, lectureships, grants etc open to university academic staff in one Commonwealth country who wish to carry out research, make study visits, or teach for a while at a university in another Commonwealth country.

It includes awards for those just beginning their academic careers right through to scholars of senior standing. Candidates from non-Commonwealth countries are eligible to apply for many of the awards. Some of the awards are also tenable in non-Commonwealth countries.

A thoroughly revised and updated edition containing:

Over 650 award schemes
A vast range of subjects
14 country sections
Awards tenable at certain non-university institutions
Organisations providing appointments services and opportunities for academics to serve as consultants or experts
Organisations providing other forms of assistance for Commonwealth Universities
Bibliography of published guides to foundations and trusts
Index to awarding organisations and named awards
Subject index

Format: 228 x 154 mm
Extent: 236 pp

Press Release


The Association of Commonwealth Universities announces new, fully revised editions of two of the four biennial titles in this series.

For Commonwealth university academic staff and researchers planning study, research or teaching visits elsewhere within the Commonwealth, or seeking funds to assist visits by Commonwealth colleagues from abroad, Awards for Commonwealth University Academic Staff 1990-92. This 236-page book contains some 573 separate entries describing fellowships, visiting professorships, grants etc.

For Commonwealth students (especially those from developing countries) planning a first degree course in another Commonwealth country, or for their advisers, Financial Aid for First Degree Study 1990-92. This 56-page booklet contains almost 140 entries covering scholarships, bursaries, grants, loans etc.


For further information about the Awards Series — see enclosed leaflets.
PAN COMMONWEALTH VETERINARY CONFERENCE

USEFUL INFORMATION ON ZIMBABWE

Int. Dialing Code: 010 263

Public Holidays: 1 January, Easter, 18, 19 April; 1 May; 25 May, 11, 12 August; 25, 26 December.

Business Hours: 8 am to 1 pm-2 pm to 5 pm (Monday to Friday) 8 am to 12 noon (Saturday).

Local Currency: Zimbabwe Dollar (Z$) (ZS = 100 cents)

Local Currency: Regs-IMP: Zimbabwe currency is not available in other countries.

Local Currency: Regs-EXP: Z$ 20 maximum

Foreign Currency: Regs-IMP: No restrictions

Foreign Currency: Regs-EXP: Up to amount imported

Duty Free: Unrestricted amount of cigarettes and tobacco for personal use. 2 litres spirits or 3 litres wine.

Driving Information: International driver's licence valid. Drive on left.

Av. Cost of 3 Course Lunch: Z$20.00

Av. Cost of 3 Course Dinner: Z$30.00

Tipping: 5 to 10%

Vaccination Req: Yellow fever - required if coming from an infected country.

Vaccination Req: Cholera. Malaria. Typhoid, Polio

Seasons:
- Summer: October to March
- Winter: May to August

Weather:
- Tropical climate but Zimbabwe's altitude moderates temperature and rainfall patterns. Summer temp ranges between 25°C and 30°C, and winter temp. between 15°C and 20°C
- Rainfall is seasonal, falling in summer.

Capital: Harare

Population: 7,600,000

Time Diff: +2 hours GMT

Language(s) spoken: English, Shona, Ndebele

Visa Req: Citizens of Commonwealth countries and most European nationals do not need a visa.

The following High Commissions, Diplomatic Missions and Official Representatives are established in Zimbabwe:

- Albania: Czechoslovakia
- Algeria: Democratic Peoples
- Angola: Republic of Korea
- Argentina: Denmark
- Australia: Egypt
- Austria: Ethiopia
- Bangladesh: Finland
- Belgium: France
- Botswana: German Democratic
- Brazil: Republic
- Bulgaria: Federal Republic of
- Burundi: Germany
- Canada: Greece
- China: Guinea-Conakry
- Cuba: Ghana
- Cyprus: Holy See
- Hungary: Nigeria
- India: Norway
- Iran: Pakistan
- Iraq: Palestine Liberation Organisation
- Ireland: Peru
- Italy: Poland
- Kenya: Portugal
- Japan: Tunisia
- Kenya: Turkey
- Lesotho: Uganda
- Libya: United Kingdom
- Malawi: U.S.A
- Mozambique: U.S.S.R
- Netherlands: Vietnam
- New Zealand: Yugoslavia
- Nicaragua: Zaire
- Sri Lanka: Zambia

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<th>Airlines</th>
<th>Hotels</th>
<th>Car Hire</th>
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<tr>
<td>Many of the world's major airlines fly to and from Harare International Airport. British Airways, TAP, Qantas and Air India are just a few examples. Airlines from many other African countries also have regular flights to and from Zimbabwe's capital. To cater for all these flights, Harare's airport has all the usual facilities including a VIP lounge, a duty free shop and a number of restaurants and cocktail bars.</td>
<td>Throughout Zimbabwe visitors are treated to a wide variety of hotels ranging from 5-star luxury facilities to all kinds of budget accommodation. Obviously, the main tourist attractions are served by many top quality hotels. Harare also has a wide range of hotels.</td>
<td>Three internationally known car hire companies offer their services in Zimbabwe. Cars of all kinds may be hired from Harare airport as well as from hotels in all the main centres.</td>
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**PAN COMMONWEALTH VETERINARY CONFERENCE**  
**HARARE 10 - 14 SEPTEMBER 1990**

**REGISTRATION FORM**

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<tr>
<th>SURNAME</th>
<th>Dr/Mrs</th>
<th>First Name</th>
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| Honours/ Degree       | Member of CVA/ZVA |

**BUSINESS:** Job Title

**ORGANISATION**

**ADDRESS**

**Telephone:**

**Telex:**

**Fax:**

```
I shall arrive in Harare on..............................................

Name of accompanying partner...........................................

L/We anticipate attending the Welcome Reception (Monday)  
L/We anticipate attending the Barbeque/Braai (Wednesday)  
L/We anticipate attending the Conference Dinner (Thursday) (Z$40.00)
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**REGISTRATION**

Zimbabwe delegates should send the appropriate payment together with their registration form to:

- CVA Conference Secretariat  
  c/o Zimbabwe Veterinary Association  
  P O Box 8387  
  Causeway  
  Harare Zimbabwe

All others to:

- Commonwealth Secretary  
  J. Archibald, ESQ.  
  Animal Care Services  
  Laboratory Animal Bldg.  
  University of Guelph  
  Ontario  
  Canada N1G 2W1

To arrive no later than 9th July, 1990.

**REGISTRATION FEE**

The delegates’ fee for the Conference is US$100.00 for the 5 days*. Daily rate is US$20.00. Members of non Commonwealth bodies - US$35.00 per day.

* This excludes all meals except where sponsored.
CALENDAR

1990

January 14-18  Seventh Annual Eastern States Veterinary Conference, Orlando, Florida. Further information: Eastern States Veterinary Association, 2614 S.W. 34th Street, Suite 4, Gainesville, Florida 32608 Tel: 904 375 5672
January 15-19  Critical Care with Medical and Surgical Management, Gran Canaria Spain. Further information: Rudolf Lunding, Animal Hospital of Lund, Sweden. Phone +46 46 150200
February 5-9  VIII AAABG Conference, Palmerston North-Hamilton. Further information: The Secretary, AAABG Dept. of Animal Science, Massey University, Hamilton, New Zealand
February 15-17  Federation of Asian Veterinary Associations 12th Council of Representatives Meeting and 57th Annual Convention of the Philippine Veterinary Medical Association, Manila, Philippines
February 28-March 3  VII Conference on Bird Diseases Branch "Poultry Diseases" of the German Veterinary Medical Society, Munich, Germany. Inf: German Veterinary Society, Univ. Hohenheim 480, PF 700562, D-7000 Stuttgart 70, Fed. Rep. of Germany. Tel: 0711-4592427. Fax: 7-22959 uni-co
May 10-12  Annual Meeting of the Swiss Association for Small Animal Medicine, Biel, Switzerland. Inf: Dr. Heinimann, Schweiz. Serum-umd. Impfstitut Bern, P.F. 2707, 3001 Bern, Switzerland. Tel: 031-344111.
May 12-13  First International Congress of ECIWO Biology. Inf: Chinese Nature-Cure Institute, C/o 545 Orchard Road, Far East Shopping Centre, 05-06 & 05-17, Singapore 0923, Republic of Singapore. Tel: 35323672, 37453307, 3272907. Fax: (65) 732563.
July 1-7  Fifth Intern. Symposium on Equine Reproduction, Deauville, France. Details later
July 9-12  Annual Meeting of European Association for Animal Production, Toulouse, France. Inf: T.E.S.A.V.T., 23 Chemin des Capelles, 31076 Toulouse, Cedex, France. Tel: 61491140.
July 29-August 4  XII Panamerican Congress of Veterinary Sciences. La Habana, Cuba 29 Inf: Dr. Alberto Delgado, Paseo 604 c/25 y 27, Vedado, La Habana 4, Cuba.
August  VI Intern. Conference on Wildlife Diseases, Berlin. Details later
September 4-7  First International Symposium on "The Rainbow Trout" Striling, Scotland. Inf: Reunion International BV/(The Rainbow Trout Symposium), Willem Kaalstraat 8, 1401 CL Bussum, The Netherlands. Tel: (0) 2159 30697 or (020) 586 28282. Fax: (0) 2159 3735775 or (020) 586 2580.
C/o Zimbabwe Veterinary Association PO Box 8387. Causeway, Harare, Zimbabwe. Tel: 726136 Telex: 26638 ZW Fax: 732921
September 10-14  XVI World Congress of Butalrics Salvador-Baia, Brazil. Inf: Dr. J. Alberto Da Silva Lyrna, President of the Congress, Centro de Administracion de Bahia, Gabinete del Vice-Presidente, 11000 Salvador BA, Brazil.
November 4-8  7th Congress of Federation of Asian Veterinary Associations (FAVA) Pattaya, Thailand

1991

August 18-24  XXIV World Veterinary Congress, Rio de Janeiro. Further information: Secretariat, World Veterinary Association, Isabel La Catolica 12, 2803 Madrid, Spain
October 2-5  WSAVA Conference, Vienna. Details later.

1992

V International Conference on Goats New Delhi, India. Details Later.
PAN COMMONWEALTH
VETERINARY CONFERENCE
Harare International Conference Centre
10 - 14 September 1990 Harare, Zimbabwe

ANIMAL HEALTH AND PRODUCTION - YEAR 2001

Organised by - Commonwealth Veterinary Association
Hosted by - Zimbabwe Veterinary Association

A conference to consider ways of improving the quality of life at village level in the less privileged areas of the Commonwealth. Three main areas will be discussed in plenary sessions followed by workshops.

TENTATIVE PROGRAMME

Monday 10 Sept
AM  Registration
PM  Opening Ceremony

Tuesday 11 Sept
Animal Health
Plenary session and workshop.
Animal health at village level with particular reference to tick borne diseases and diseases of small ruminants. How can health programmes be delivered effectively?

Wednesday 12 Sept
Animal Production
Plenary session and workshop.
Village poultry production, dairy schemes, co-operatives etc. Importance of draught animals in the rural economy.

Thursday 13 Sept
Veterinary Education and Training
Plenary session and workshop.
Review of veterinary training within the Commonwealth. Why is it necessary for Commonwealth students to study outside the Commonwealth? Training in extension techniques and continuing professional development to be reviewed.

Friday 14 Sept
AM  Adoption of resolutions and recommendations
PM  Close of conference

It is hoped that His Excellency Mr Robert Mugabe, President of Zimbabwe will open the conference and that His Excellency Sir Dawda Jawara, President of the Gambia will address the conference.

Social events are being arranged and for those wishing to combine a holiday in Zimbabwe with the conference, arrangements will be made for safari tours to Victoria Falls, Kariba, Hwange Game Reserve etc.

The official language of the conference will be English. Delegates from outside the Commonwealth, as well as within, will be welcome.

CALL FOR PAPERS
Anyone working in any of the areas mentioned above who would like to present a paper at the conference should submit their paper for consideration to:

Dr W J Pryor
Chairman Scientific Sessions Committee
CVA Conference
'Galvij', RMB n141
Pryor's Road, Scotsburn
Ballarat, Victoria 3352
Australia

For further information contact:

CVA Congress Secretariat
c/o Zimbabwe Veterinary Association
P O Box 8387
Causeway
Harare
Zimbabwe
Tel : 726136
Telex: 26686 ZW
Fax: 732621