COMMUNITY ANIMAL HEALTH CARE SERVICES

STRATEGY REVIEW DOCUMENT 2013

DEPARTMENT OF AGRICULTURE, FORESTRY AND FISHERIES

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Addendums:

1. Schedule 1
2. Schedule 2

ACRONYMS

AIDS	Acquired Immunodeficiency Syndrome
Alive	Partnership for Livestock Development, Poverty Alleviation and Sustainable Growth in Africa
AIDA	Animal Identification Act, 2002
CA	Contagious Abortion (Brucellosis) of Bovine *I* Goats
CAADP	Comprehensive African Agricultural Development Programme
CASP	Comprehensive Agricultural Support Programme
CCS	Compulsory Community Service
CPD	Continued Professional Development
CVC	Community Veterinary Clinic
DAFF	Department of Agriculture, Fishery & Forestry
EPWP	Expanded Public Works Programme
FAO	Food and Agriculture Organisation of the United Nations
GDP	Gross Domestic Products
ICT	Information and Communication Technology
IDP	Integrated Development Plan
LDO	Livestock Development Officer
NEPAD	New Partnership for Africa's Development
NGO	Non-Governmental Organisation
OBP	Onderstepoort Biological Products
OIE	Office of International des Epizooties
PAHC	Primary Animal Health Care
PDA	Provincial Department of Agriculture
PFMA	Public Financial Management Act
SAVA	South African Veterinary Association
SAVC	South African Veterinary Council
SPS	Sanitary and Phyto-Sanitary
TB	Tuberculosis of Bovine
VPHO	Veterinary Public Health Official
WB	World Bank
WTO	World Trade Organisation

1. EXECUTIVE SUMMARY

About 40% of the total population of South Africa of which the majority is poor is, to some extent, dependent on rural agricultural production. Food security and socio-economic development in resource poor areas/countries is largely governed by the successes of agriculture.

Sustainable and moreover commercialized livestock production is the key to poverty alleviation as well as to the growing demand for food from animal origin. Both, non-disease associated aspects relating to improved animal husbandry and resource utilization play a key role in improving food supply and human health. There is also a critical shortage of veterinarians and para- veterinary staff making it rather difficult to service the rural communities.

In order to address these challenges government took a decision to start and fund the Primary Animal Health Care (PAHC) programme and Compulsory Community Service programme for newly qualified veterinarians (CCS) to kick start the provincial focus on rural animal health care. This step involves the implementation of primary animal health care programme which deals with three major components: a) preventive veterinary activity (vaccinations, animal first aid, etc) b) ambulatory services (rural outreach activity & spay campaigns) c) Extension/Awareness activity . PAHC thus provides the means to extend veterinary services to more communities especially those that are far from commercial centres. Compulsory Community Service will afford newly qualified veterinarians the opportunity to render service in the rural areas where their services is highly needed. Some of the key challenges identified such as the shortage of veterinarians in the country, high migration rate of newly qualified veterinarians to overseas countries and skewed distribution of available veterinarians to the detriment of the rural provinces would be addressed.

2. INTRODUCTION

2.1 Description of Community Animal Health Care

Agriculture in South Africa just like in the majority of other economic sectors is characterized by dual stream commercial and subsistence with an active "small scale" farming system in between. As a result livestock health and quality has suffered a great deal especially in the communal areas which suffer from unequal access to infrastructure, services and markets by the different branches. Distorted distribution of veterinary services and uneven access to animal health care, especially in rural provinces remains a key challenge for the South African Agriculture and related industries. While the poorer provinces require access to a range of veterinary services to support livestock production, prevention of

zoonotic disease and livestock trade, economic growth and boarder rural development goals of the South African Government, this is adversely affected by unavailability of the accessible and affordable veterinary services. According to stats SA 2010/11 reports the income from animal products has accounted for about 48% of the gross income of R131, 6 billion from the total agricultural sector.

Prevention of animal disease is the first step in ensuring the success of PAHC which is aimed at reducing livestock losses, improving human and animal health. The scope of includes the diagnosis, treatment and management of animal diseases; prevention, veterinary extension services; and on-going support with famers and communities. This will result in improving production capacity and trade in animals and animal by-products, as well as on public health and consumer food security. In the broader picture these activities contribute to rural development and intervene in the poverty and hunger spiral. The livestock sector plays a crucial role in the economy of resource-poor communities by producing protein-rich foods, generate income and employment. An increase in animal productivity will greatly contribute to poverty relief and social development. Rural development is one of the broader government objectives where agriculture and in respect of animals, veterinary science, together with animal production programme, has a critical role to play. PAHC programme becomes crucial to assist communities in maximizing livestock production, responsible pet ownership, and prevention of zoonosis and health animals.

It is of great importance that animal owners and emerging farmers have to be encouraged to change and become active participants in the broader economy for an example to commercialise the keeping of livestock. The majority of the 15 million cattle which are in South Africa are reared in communal / subsistent farming areas where cattle selection is not so rigid. As a result there are more cattle in communal grazing lands resulting in massive overgrazing. The quality of such stock is poor and the animals are more susceptible to a variety of infectious diseases. Looking at the 2002 livestock census, it is estimated that approximately 28% of the ruminant livestock listed under "Current status" are owned by the emerging and subsistence sectors. The estimated contribution from the communal areas to the total cattle (beef and dairy), sheep and goat numbers in the RSA is 40, 8%, 12, 1% and 69, 5% respectively. Although the emerging and subsistence sector has the biggest potential for development and increased productivity, its current average contribution is 30% of this sector. The calving percentage in the emerging sector is estimated at approximately 35% compared to the 70% in the commercial sector, which further emphasizes the importance of

rendering support service to this farming sector through primary animal health care. The initiative by the DAFF and the provincial authorities therefore to increase the veterinary and diagnostic capacities in the provinces with facilities and personnel, also into the more remote rural areas, is to be commended.

Compulsory Community Service (CCS) for veterinarians was approved by Departmental Executive Committee (DEXCO) in 2003 in response to the aforementioned challenges by formulating two strategic national initiatives that complement each other, namely CCS Programme and Primary Animal Health Care (PAHC). Primary animal health care in the context of this document is defined as providing essential animal health care based on practical, scientifically sound, socially acceptable methods and appropriate technology aimed at improving accessibility to individuals and famers in the community. It is through their full participation of all relevant stakeholders and at a cost that the community and the country can afford to maintain at every stage of the livelihood of communities and livestock development especially in poor resourced communities. PAHC is an approach to animal health by contributing to the core strategies within the plan for Agriculture, namely: Equitable Access and Participation, Global Competitiveness and Profitability, and Sustainable Resource Management.

2.2 The Aim

It is to provide veterinary services, especially to resource poor communities of South Africa thus improving on the livelihood and Animal Health.

2.3 The main objectives of Community Animal Health Care Services

- To promote accessibility is the main important element of CAHC that ensure that veterinary services is rendered to the rural and peri-urban areas where the most needy and vulnerable groups of the population live.
- To promote community participation by meaningful involvement of the community in planning, implementing and maintaining veterinary services
- To promote veterinary extension services by providing adequate training to communities on prevention and control of endemic animal diseases.
- To use appropriate technology that is scientifically sound, adaptable to local needs, and acceptable to those who apply it and for whom it is used.
- Facilitate inter-sectoral collaboration to improve animal health services and strengthen vertical linkages within government and horizontal linkages at national, provincial, district and municipal level.

2.4 Beneficiaries

A successful CAHC programme requires a Public Private Partnership with a number of stakeholders such as Government Veterinary Services, communities, academic institutions, private veterinarians, pharmaceutical companies, welfare organisations and NGO's.

3. BACKGROUND

3.1 Situational Analysis

Following provincialization and decentralization of agriculture and veterinary services under the Constitution of the Republic of South Africa, 1996, provinces have their constitutional right (functional areas of Exclusive Provincial Legislative Competence) to regulate their own veterinary services as stipulated in Part A, Schedule 5 of the constitution.

The shortage of veterinarians in the country, high migration rate of newly qualified veterinarians to overseas countries and skewed distribution of available veterinarians has led to the detriment of veterinary service in the rural provinces. The consequence of this challenge is that South Africa may be unable to trade or export products of animal origin thereby affecting the agriculture sector contribution to the GDP where livestock trade plays a significant role.

In order to address these challenges government took a decision to start and fund the project on Primary Animal Health Care (PAHC) and Compulsory Community Service for newly qualified veterinarians (CCS) to kick start the Provincial focus on rural animal health care. Primary animal health care programme will focus on activities related to treatment, prevention and control of diseases as well as sterilization campaign and the ambulatory service.

In sub-Saharan Africa, Jahnke (1982) estimates that annual demand is increasing by 4.2% for meat. The average contribution of the emerging and subsistence sectors is less than 30% but fluctuates widely with species (12% for sheep to 70% for goats) and province (3% of cattle numbers in the Western Cape and Free State to 71% in the Eastern Cape). Small-scale farmers and the landless, including women, are responsible for rearing most livestock in Africa (Mlangwa and Kisauzi, 1994; McIntire et al., 1992). For this reason women and their children (the youth) will be our prime target and key beneficiaries in the PAHC.

3.2 Disease trends

Globally, there are daunting challenges facing animal health sector; threat of emerging and re-emerging diseases and the increased global trade of animals with associated increased risk of trans-boundary diseases to mention a few. The Office of International des Epizooties (OIE) also known as the World Organization for Animal Health regards the evaluation of veterinary services as an important contribution to biosecurity, animal disease risk management, economic reforms and international trade, food security and poverty alleviation. Improving access to veterinary services promotes animal production, public health and food safety, thereby improving the livestock-based livelihoods. 75% of emerging animal diseases can be transmitted to humans. 80%of pathogens that could potentially be used in bioterrorism are of animal origin (example anthrax spores –military bassoon)

Eliminating the pathogens that cause disease in animals one can prevent subsequent emerging and re-emerging infectious disease in human, and at the same time ensure of adequate supply of good quality, safe food for all.

It is estimated that world demand for animal protein (milk, egg, meat) will increase by 50% by the year 2030.This demand will only be met if veterinary services can provide a suitable level of surveillance to cope with the complexity of the animal production system of the future . 20% of animal production worldwide is lost as the results of disease.

3.3 Distribution of Veterinary Services.

FAO recommends that the number of veterinarians needed to equitably run and maintain a government Veterinary Service is estimated to be one veterinarian per 100,000 Livestock Units (LU); and the number of Animal Health Technicians (AHTs) required is estimated at one per 2,000 to 5,000 L.U.'s. South Africa's most recent statistics indicate that there are 11 million head of cattle, 28 million sheep, 5.5 million goats, 1.6 million pigs, 0.5 million ostriches. If a livestock unit is equivalent to one head of cattle, and 6 heads of sheep and goats, we therefore need a total of 253 veterinarians, and 4714 Animal Health Technicians nationally.

Summary of professional and technical manpower needs

	FAO recommendations	Current	Shortfall
SV (Provincial)	253	187	66

AHT	4714	1167	3547

From this table above we can see that while the shortage of veterinarians is not so critical, there is a huge **shortage** of the AHTs who are the people expected to be in direct contact with the public; hence the magnitude of the problem the country is facing, and the need to do something urgently.

3.4 Related Challenges

The following are challenges that must be attended to for the success of this program:

3.4.1 Theft of material and vaccine

Due to the remoteness of most areas envisaged for this program there might be challenges of the security of the materials being used. It is suggested here that the provinces must exercise adequate security care so that losses through theft are eliminated. Proper record keeping and periodic auditing of resources where they are to be kept could help to curb this situation. When the vaccines have been purchased on behalf of the provinces, accurate records must be kept by the vaccine company as to who receives them on behalf of the province (s), and if possible be consistent in that same individual should be the only person who collects the vaccines. The name of the provincial coordinator should be known both by DAFF coordinator and the OBP vaccine issue office. All documentation must be kept safely by all parties and be presented at the time of audit in order to verify its correct use

3.4.2 Inadequate Vaccine storage

For those areas where there are challenges of vaccine storage provinces should ensure that they have adequate functional refrigeration facilities at all end user stations where such vaccines and selected medication are to be kept. The fridges could be either paraffin or gas operated (if there is no electricity), but they must always be in working order and be lockable at all times to ensure safety. Thermos flasks may be used for field vaccination provided that excess quantities must not be carried out from the base. This will require that accurate estimates of number of animals to be vaccinated on a particular day and place must be made, and just carry an additional 10% to accommodate any variations in actual numbers. Back and forth re-handling of vaccines should be avoided wherever possible as it is under such conditions that cold chain storage might be compromised.

3.4.3 Lack of transport

The usage of subsidised motor vehicles appears to have provided a solution of transport requirements. Where this is still not provided a request for a reliable transport from the Provincial "transport pool" must be made available ahead of time so that a set program can be carried promptly.

3.4.4 Lack of accommodation

The effective provision of Primary Animal Health Care services expects that people involved in it operate the services within the communities they stay. Office accommodation space could be sought for from other government offices operative in the same community. It is therefore imperative that field officials establish good cordial working relationships with all other officials at any level in the community. We cannot work in isolation, but as a team delivering quality services that the communities will benefit from.

3.4.5 Lack of State Vets in the rural communities

The scarcity of State Veterinarians especially in the rural communities continues to be a challenge. Ways of attending to this issue may be different in the provinces but there should be a system in place that ensures that some form of ambulatory rotation is in place and available to these far communities.

3.4.6 Laboratory facilities

Although there are insufficient laboratory facilities in the field, AHTs must be investigation conscious by taking as many but meaningful and good samples of any condition they have seen in field and promptly submit such to the nearest laboratory facility in their province. Record of such samples and results must be kept, as this will help in making appropriate decisions at higher levels.

3.4.7 Veterinary Public Health linkages to Animal Health Services

This issue requires urgent attention where such linkages do not exists. The two disciplines are field oriented yet they tend to work in separate silos. In a food safety environment as is carried out by the Veterinary Public Health Officers, close working relationships with AHT is imperative especially in dealing with suspect zoonosis outbreaks.

4. PROBLEM STATEMENTS

4.1 Lack of veterinary services in poorly resourced communities

4.2 Increase in outbreaks of animal diseases of public importance

4.3 Limited livestock trade of products of animal origin

4.4 Poor livestock production

4.5 Lack of capacity of highly skilled and experienced veterinarians

5. IMPLEMENTATION STRATEGY

5.1 Organizational Structure

Like with any organisation, there has to be an operational structure to give direction of command and responsibility. It is proposed that such a structure be operative for this programme at four levels namely**: National, Provincial, State Vet, and Site levels,** each level with its own distinct functions.

Level 3 (State Vet Level) is the "heart beat" level as it is at this level where most planning and site identification is made. The supervision of the AHTs, program implementation, material usage and storage, reporting and record keeping is done at this level although the intensity of program coverage is dependent upon the enthusiasm and the drive the local veterinarian has. Where there is no local veterinarian, this responsibility will have to be done by a more senior and experienced AHT, who will be supported by the Regional Veterinarian. Levels 1 and 2 play more of coordination roles in this program with some specific roles as assigned below. The AHT at the Site Level will be expected to be an individual who is a technical field expert and also experienced in extension work.

Fig.1 PROPOSED PAHC ORGANOGRAM (DAFF)

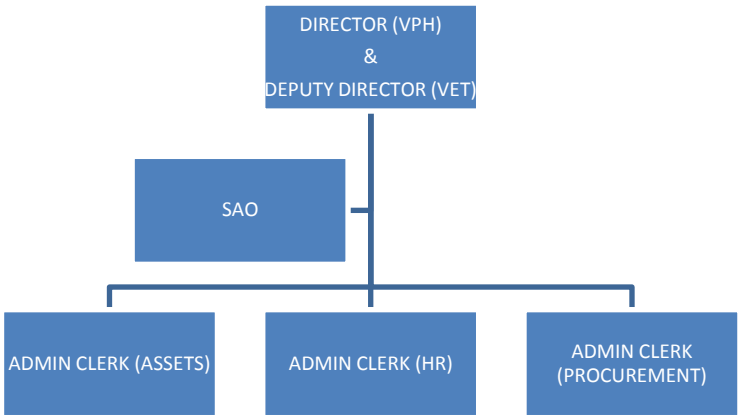
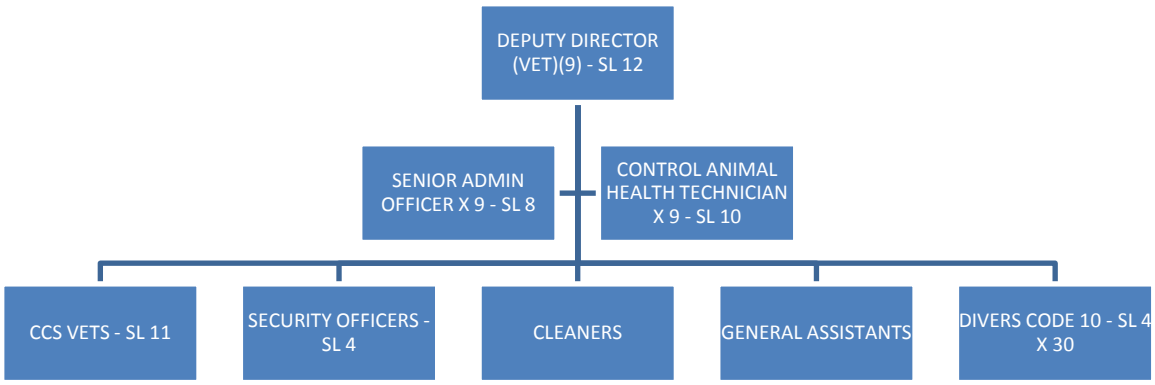


Fig. 2 PROPOSED ORGANOGRAM (PROVINCES)



Level 1. National Coordinator (NC) will be responsible for the overall coordination of the PAHC programme in South Africa, ensuring that the programme is being implemented according to the policies and norms set forth for the programme.

Duties

- He/she will report to National **Director** of Animal Health on the progress and challenges faced by the programme, **and** suggest corrective measures.

- **Where** PAHC pilot **projects have** been set up at the CRDP **pilot** sites, he/she will prepare a quarterly ministerial report on the functioning of these specific projects. Such reports will be submitted through all relevant channels (officials)

- Where possible attend provincial PAHC meetings as an invited ex-official, to guide wherever required.

Level 2. Provincial Coordinator (PC) will be a veterinary official in a province who has been designated as such by the Provincial Director of Veterinary Services to drive the programme in that particular province.

Duties

- Assist State Vets and AHTs in selecting pilot project sites initially, and any other follow-up sites in the province.

- Prepare provincial PAHC budgets.

- Procure items and materials needed for this project in that province.
- Maintain safe custody of all materials belonging to the PAHC project.
- As provincial PAHC spokesperson attend all such meetings in the province and also represent the province at meetings called at the national level.

Level 3. State Vet Office **(Local Municipality) Level coordinator /** Supervisor will be responsible for implementing this program at the State Vet level.

Duties

- Provide clinical services to the project site and all other centres which are implementing PAHC program in his/her State Vet Area.
- Provide guidance and leadership to all the AHTs in the area on such matters as: vaccination campaigns, dosing of stock, disease surveillance and reporting.
- Be vigilant on animal disease control in the area at all times, and where epidemic occur. Lead the local Disease control operation team.
- Hold periodic meetings with all project stake holders appraising them of project progress or / and challenges if any, and propose remedy.
- Responsible to the provincial coordinators on all PAHC project matters.
- Ensure safe custody of all project materials (medicines, equipment, etc)
- Ensure vaccines are stored under proper functional cold-chain at all times.

Level. 4. Project Site Officer will be the person in-charge (AHT) of that project site responsible for the implementation of the PAHC project.

Duties

- Carry out all technical duties at the pilot site / project site (vaccinations, dosing, disease surveillance, sampling, and any treatments as directed by the State Vet.)
- Act as a link person with other officials from other directorates / departments, and municipalities on all matters concerning livestock health the project site, and the surrounding rural communities.

- Be a peoples and development conscious

- Work in close collaboration with VPH staff in the area in respect of meat inspection activities and zoonosis

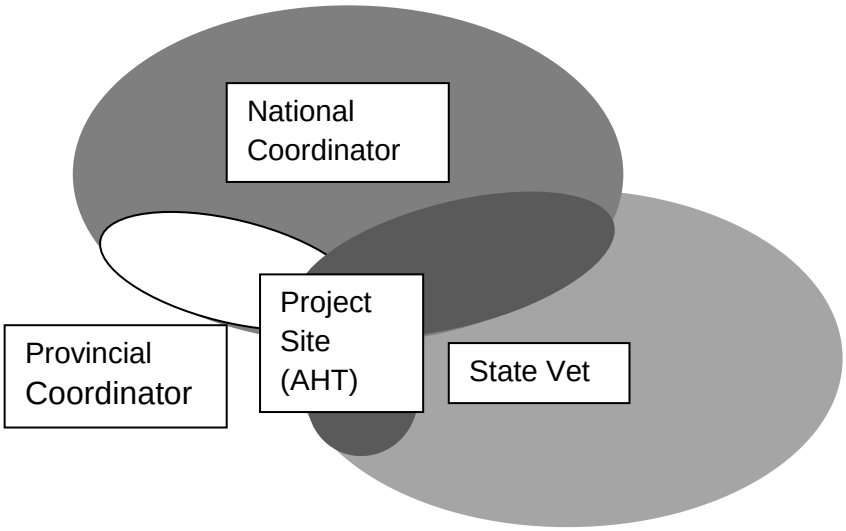


Fig. 2 shows a diagrammatic interrelation layout of the four levels

The over lapping circles show that at every level each group is expected to know what the program is all about and what the public expects them to do.

An example of the divide between private and public responsibilities and farmer expectations is given below

	Subsistence/Traditional farming system		Small Scale farming sector		Commercialized farming sector	
	Theoretical service delivery		Theoretical service delivery		Theoretical service delivery	
	Private	Public	Private	Public	Private	Public
Clinical intervention		X		X	X	
Production, distribution of drugs/vaccines		X		X	X	
Vaccination/vector control		X		X	X	X
Diagnostic support		X		X	X	X
Veterinary research		X		X	X	X
Extension		X		X	X	X
Surveillance		X		X	Starting	X

Quarantine, movement control		X		X	Starting	X
Drug quality control		X		X		X
Food hygiene/inspection		X		X	X	X
Animal Identification	Starting (needs to move quicker)		X		X	X

The Basic Animal Care (BAC) Programme will support the following programmes of Government:

- Agriculture Strategic Plan
- Agriculture Starter Pack and Scheme ASP
- Comprehensive Agricultural Support Programme CASP
- Integrated Development Plan IDP
- Integrated Food Security and Nutrition Programme IFSNP
- Integrated Sustainable Rural Development Programme ISRDP
- Land Redistribution for Agricultural Development LRAD
- Public Works Programme PWP

5.2 Stakeholder involvement

5.2.1 Department of Agriculture, Fishery and Forestry

- The role of the DAFF is reflected within its vision and mission - increase production from animals by 10-15 % per annum, over the **next** three years.
- Create a favourable and conducive environment for agricultural reform, credit availability and financial support.
- Establish **principles,** norms and standards on PAHC service provision.
- Mobilise initial funding **and** facilitate the implementation and monitoring of PAHC and CASP programs in the provinces.

5.2.2 Provincial Departments of Agriculture Veterinary Services

- Plan and design own PAHC plan in accordance with veterinary needs analysis in specified areas of the province.
- Perform a feasibility study on specific PAHC programmes.
- Make provision for information supply and education of livestock production of the targeted groups.
- Liaison by Animal Health Technicians and State Veterinarians with local government, beneficiaries and service providers.
- Make use Compulsory Services Veterinarians in PAHC.

5.2.3 Local Government (Metropolitan, District and Local Municipalities)

- Coordinate development efforts at local government level, IDP and LDO.
- Depending on the structure of management at local level the responsible unit should be involved with PAHC planning, financing, etc.

5.2.4 The Beneficiaries and Target Groups

- Every livestock farmer
- Government will benefit from the overall mobilization of delivery of services

5.2.5 Service Providers

- Provincial Veterinary Services
- Veterinarians in private practice
- Animal Welfare organisations
- Community Veterinary Clinics (CVC's) **of** the SAVA
- Outreach Programme **by** Faculty of Veterinary Science, University of Pretoria.
- Onderstepoort Biological Products Agriculture
- Organised Agriculture

- Pharmaceutical Companies
- Private Contractors
- Cooperatives
- Other NGO'S

5.3 Methodology

5.3.1 Promote Accessibility

Responsibility	Resources	Activities
DAFF	Human Financial	Policy Planning
PDA	Human - Management - CCS Vets - AHTs - Vet Nurses - Technologists - Admin Financial - Compensation of employees - Operational budget Physical - Clinics - Mobile vehicles - AHT Tool Boxes ICT - Cell phones	Human Expenditure control according to the PFMA Veterinary service points for the community Communication

5.3.2 Promote Community Participation

Responsibility	Resources	Activities
DAFF	Human Financial	Policy Planning
PDA	Human - Management - CCS Vets - AHTs - VPHO - Vet Nurses	Focus group discussion Community forums

	Financial - Operational budget ICT	Expenditure control according to the PFMA Communication Presentations

5.3.3 Promote Veterinary Extension

Responsibility	Resources	Activities
DAFF	Human Financial	Policy Planning
PDA	Human - Management - CCS Vets - AHTs - Vet Nurses - Technologists - Admin Financial - Operational budget Physical - Clinics - Mobile vehicles ICT	Training of Vet officials CPD & Non-CPD Congresses Training of beneficiaries Research & Development Expenditure control according to the PFMA Veterinary service points for the community Communication Presentations

5.3.4 Use of Appropriate Technology

Responsibility	Resources	Activities
DAFF	Human Financial	Policy Planning
PDA	Financial - Operational budget Physical - Mobile vehicles ICT - Cell phones	Expenditure control according to the PFMA Veterinary service points for the community Consolidation and collation of data

	- Digital Pens - Data management Software - Laptops - GIS - Hybrid Tablets - 3G/4G Technology - Cameras - Portable Printer	Develop Epidemiological maps Generate Audit & Certification reports online

5.3.5 Inter-sectoral Collaboration

Responsibility	Resources	Activities
DAFF	Human Financial	Policy Planning
PDA	Human - Management - CCS Vets - AHTs - Vet Nurses - Technologists - Admin Financial - Operational budget Physical - Clinics - Mobile vehicles ICT	Meetings Workshops Disease Control Campaigns Spay campaigns Trade facilitation Expenditure control according to the PFMA Veterinary service points for the community Communication Presentations

6. COST RECOVERY PLAN

This is basically a financial operational plan that aims at recovering some of the costs of medicines from the farmers. Recovery cost levels may be different, but a popularly used percentage mark-up is 10% of the purchase cost. As the cost of animal medicines continues to go up every day, and the livestock populations also continue to grow as a result of effective animal health care provided, demand for larger volumes of medicines will develop. If there is no cost recovery plan in place and budgetary provision becomes unreliable then the sustainability of the program is also threatened. The advantage of having the cost recovery plan is that a reservoir of funds is developed and becomes available at any time ensuring sustainability and growth of the program. It also trains the farmers to pay for the services rendered and in the long run a culture of paying for services develop; and the

veterinary private services in this country will also grow. It is expected that the Finance division at DAFF or the Province should think through on how this can be implemented and what type of account should be developed for this program. Meanwhile a consolidated Tariff of Fees charged for veterinary services rendered to the public needs to be compiled for use in all provinces where some farmers are already paying for the clinical services.

Funds for this project will be allocated to the Provincial Veterinary Directors by the DAFF following a mechanism of notification that will be developed by the DAFF Finance Division. The starting amount is not yet known, but it is proposed the full funding be provided up to the end of the fourth year of the program. During this period all services will be provided free of charge to all farmers in the CRD sites selected in each province. From year five the farmers' contributions will be phased in accordingly to the percentage levels indicated under the Table "Shared Contributions between government and farmers. There are possibly many ways to approach this phasing program, but the most ideal will be that farmers will from year five start to pay for the services rendered on a Cost Recovery basis.

Since most provinces levy a fee on some services rendered and that most farmers (in such provinces) are already paying for the clinical services it is recommended here that DAFF draws up a common composite schedule of Tariff for the fees to be charged in all the provinces.

7. MONITORING & EVALUATION

Key Performance Area	Indicator	Type of evidence
Promote Accessibility	No of PAH interventions (Mobile Veterinary Units outings) No of animals treated No of animals vaccinated No of clients assisted	Service Book/ Client Contact Form Vaccination certificates
Promote Community Participation	No of Focus group discussion No of Community forums attended	Attendance Register Minutes
Promote Veterinary Extension	No. of training/courses attended by Vet officials No of beneficiaries trained No of research projects	CPD Certificates Non CPD Certificates Attendance Register Peer Reviewed Article
Use of Appropriate Technology	No of PAHC reports submitted No of Epidemiological maps developed	Monthly, Quarterly & Annual Reports Epidemiological maps
Inter-sectoral Collaboration	No of meetings/workshops attended No of Disease Control & Spay campaigns	Attendance Register Campaign Report

8. ASSUMPTIONS & RISKS

7.1 Schedule

7.2 Budget - Key concerns for most programmes are financial viability and long-term cost-effectiveness of CAHC activities.

7.3 Resource availability

8 CONCLUSION

Financial stringencies severely constrain the ability of many developing countries' governments to provide basic animal health care services, particularly in rural areas. Given that the livelihood of smallholders often depends at least partially on livestock, lack of access to minimum animal health services increases these people's vulnerability. In addition trade barriers and at times complete export bans undermine the already weak economy of most of these countries. Ultimately it would be desirable to develop a comprehensive primary animal health programme to protect rural population from the spread of diseases and enhance productivity in those areas. PAHC will be introduced as part of the Comprehensive Rural Development Programme and will contribute positively towards creating sustainable livelihood to the communities.

PAHC has a vital role to play in improving the quality of human life and veterinary practice itself offers excellent opportunities for building a sense of personal and community responsibility for the promotion, care, and restoration of health, through their direct interaction with the rural population while caring for their livestock.

In line with the resolution of the South African Veterinary Council to promote food security / safety in all sectors of the economy and to develop and promote preventive medicine / disease strategy at farm level including subsistence and semi commercial farmers / animal owners, the rules for animal health technicians / officers will assist in accomplishing PAHC. See below…

SCHEDULE I

RULES FOR ANIMAL HEALTH TECHNICIANS

1. DEFINITIONS

Any word or expression in this Schedule to which a meaning has been assigned in the Act meaning, and

"Act" means the Veterinary and Para-veterinary Professions Act, 1982 (Act No. 19 of 1982), and the regulations made thereunder;

"Primary animal health care" means general care, disease prevention, parasite control, husbandry, housing and feeding of animals.

2. SERVICES PERTAINING TO THE PROFESSION OF ANIMAL HEALTH TECHNICIAN

For the purposes of the Act the following services must be regarded as services which pertain to the para-veterinary profession of animal health technician:

2.1 Surveillance and inspection of all livestock, poultry and game, and where relevant the reporting of all diseases listed by the Office International des Epizooties (OIE) guidelines in disease control areas, at livestock auctions, sales and during routine farm visits and inspections;

2.2 Implementation of vaccination programmes in livestock, in order to prevent, and/or control animal diseases and to strive towards establishing a disease- free animal population and to administer these vaccines;

2.3 Implementation of parasite control programmes in livestock, in order to prevent, and/or control animal parasites and to strive towards establishing a parasite-free animal population;

2.4 To carry out abattoir inspections and report in writing to the veterinary public health directorate/s of the national and provincial departments of agriculture in respect of essential national standards;

2.5 To carry out meat inspections and other duties under the relevant abattoir legislation, if authorised thereto by the provincial executive officer;

2.6 Perform delegated duties pertaining to regulated animal diseases, listed under the relevant animal disease control legislation, including the various eradication schemes, including but not limited to the –

2.6.1 Brucellosis eradication scheme; and

2.6.2 taking of samples for the diagnosis by a veterinarian of brucellosis in animals and the testing of animals for tuberculosis by means of a intradermal tuberculin test, provided that the animal health technician has passed a course approved by the Department of Agriculture;

2.7 Extension services (including training and education) to farmers, community members and their children, to protect and promote the health and wellbeing of animals;

2.8 The collection, capturing and evaluation of data and the compiling of reports while assisting with epidemiological and research projects;

2.9 The collection of specimens to assist in the investigation of reproductive and fertility problems in livestock;

2.10 The collection of samples, including blood smears, brain smears, impression smears, skin scrapings, wool scrapings, faecal samples, but excluding the collection of samples by biopsy;

2.11 The examination and analysis of samples including blood smears, skin and wool scrapings, urine analysis and faecal samples and elementary clinical chemistry;

2.12 Carrying out of basic post-mortem examinations and the collection and submission of samples for microbiological, toxicological, histopathological and serological investigation;

2.13 Artificial insemination provided that the animal health technician is registered as an inseminator with the Registrar of Animal Improvement in terms of the Animal lmprovement Act 1998 (Act No. 62 of 1998);

2.14 Rendering primary animal health care to resource poor communities; and

2.15 Performing other duties authorised by legislation.

3. PROCEDURES PERFORMED ON ANIMALS

3.1 An animal health technician may carry out the following procedures on animals without veterinary supervision:

3.1.1 Open castrations of –

3.1.1.1 Cattle under 3 (three) months;

3.1.1.2 Sheep and goats under 2 (two) months; and

3.1.1.3 Pigs up to 7 (seven) days;

3.1.2 Dehorning of immature animals under 4 (four) months;

3.1.3 Tail docking of

3.1.3.1 Pigs up to 7 (seven) days; and

3.1.3.2 Sheep by using the open method under 2 (two) months and the elastrator method under 6 (six) weeks;

3.1.4 Feet trimming; and

3.1.5 Branding.

3.2 An animal health technician may carry out procedures on animals on instruction and supervision of a person registered to practise a veterinary profession, including but not limited to-

3.2.1 the lancing of abscesses;

3.2.2 the treatment of septic wounds; and

3.2.3 the administration of injections and medicines.

3.3 An animal health technician may assist the veterinarian when the veterinarian is performing surgery outside the theatre environment or under field conditions. (This rule was approved by the council on 24 July 2007, however, is not amended yet and is not published in the Government Gazette)

4. EXECUTION OF SERVICES

4.1 Notwithstanding the provisions of rules 2 and 3.2 an animal health technician must perform the services referred to in rule 2 only during the course of employment

4.1.1 with the State; or

4.1.2 on behalf of a person –

4.1.2.1 registered to practise a veterinary profession; or

4.1.2.2 employing a person registered to practise a veterinary profession; or

4.1.3 during the course of employment by a person-

4.1.3.1 registered to practise a veterinary profession; or

4.1.3.2 employing a person registered to practise a veterinary profession.

4.2 Rules 2 and 3.2 must not be construed in a manner so as to prohibit any other person registered to practise a veterinary or para-veterinary profession from performing procedures that pertain to their profession.

5. EMERGENCY TREATMENT

In a case of emergency an animal health technician may also render other services which fall within the scope of training and experience of an animal health technician and which are essential to save lives or relieve suffering in animals, on condition that a report thereon is made to the person referred to in rule 4 as soon as possible and the further treatment of such animal is entrusted to that person or another person registered to practise a veterinary profession.

6. CODE OF CONDUCT FOR ANIMAL HEALTH TECHNICIANS

6.1 A person who practices the para-veterinary profession of animal health technician must base his or her personal and professional conduct on the following:

a. He or she is a member of a learned and honourable profession and is required at all times to act in a manner that shall maintain and promote the prestige, honour, dignity and interest of the profession and of the persons by whom it is practised;

b. He or she is morally obliged at all times to serve the public to the best of his or her ability by maintaining the highest standard of animal health care and professional conduct;

c. He or she shall work in cooperation with colleagues and members of other professions in a responsible and professional manner; and

d. He or she will not permit himself or herself to be exploited in a manner, which may be detrimental to an animal, the public or the profession.

6.2 An animal health technician must:

a. execute tasks discerningly and faithfully and must refuse to take part in any unethical behaviour or procedure;

b. keep himself or herself informed of all the laws which affect him or her in the practising of his or her profession;

c. be familiar with the ethical rules applicable to animal health technicians and must promote these rules at all times;

d. regard any information acquired during the course of his or her employment as strictly confidential and must refrain from divulging such information to any person except his or her employer;

e. refrain from expressing any criticism in public through which the reputation, status or practice of a colleague in the profession is or could be undermined or injured, or through which a reflection is or could be cast on the professionalism, skill, methods of conduct of such colleague; and

f. at all times, keep detailed and accurate records of all information and procedures performed by him or her for at least 3 years.

6.3 All persons practising as animal health technicians are working for the same good cause and they must therefore cooperate with each other and the authorities concerned to promote this cause.

6.4 The methods employed by a person practising as an animal health technician must comply with the applicable minimum Good Laboratory Practice Code (GLPs) and other standards as determined from time to time.

SCHEDULE II

PROPOSED VACCINATIONS UNDER PAHC

This is the proposed vaccination list for a subsidised programme for traditional and emergent producers of farm animals and in communities for pets as identified by the Glen Workshop in July 2008.

<u>In cattle</u>

Anthrax

Black quarter

Rift Valley fever

Contagious abortion (brucellosis)

Lumpy-skin disease

<u>In Sheep</u>

Bluetongue

Rift Valley fever

Black quarter

Pulpy kidney

Pigs

None

Poultry

Newcastle disease

Horses

African horse sickness

Anthrax in own outbreak areas

Dogs

Rabies prophylactic and during an outbreak

Canine distemper

Cats

Rabies prophylactic and during an outbreak

SCHEDULE III

DISEASES AND CONDITIONS TARGETED FOR PAHC PROGRAMMES

Table on the Categorization of Animal Diseases [obtained from the Policy: Control of Animal Diseases]

Table of OIE listed diseases and other diseases that are known to be of concern in South Africa, specifying:

i) Which diseases qualify for classification as controlled animal diseases according to predefined selection criteria outlined in the policy (Section 3.2), and

ii) Which diseases should be targeted for prioritization during initial subsidised primary animal health care programmes according to policy (Section 3.1).

Diseases OIE listed	Classification criteria for controlled animal diseases according to policy	**Categorization as**	To be targeted for	**Comments**

diseases and other diseases that are known to be of concern in South Africa	Zoonosis [1]	Rapid spread [2]	Collective control [3]	Threat to industry [4]	Trade sensitive [5]	**Controlled Animal Disease [6]**	**PRIMARY Animal Health Care Programmes [7]**	
GENERAL								
Any animal disease which is not indigenous or native to the Republic [8]	possibly	possibly	possibly	possibly	Likely	X	possibly	
MULTIPLE SPECIES DISEASE AS LISTED BY THE OIE								
Anthrax	X			X	X	X	X	

1. Zoonosis: The disease is transmissible to and able to cause disease in humans.
2. Rapid spread: The disease is highly transmissible and has the potential for rapid spread, independent of the actual movement of diseased animals and irrespective of farm boundaries.
3. Collective control: The disease is more effectively managed by collective control strategies than by the efforts of an individual animal owner.
4. Threat to Industry: The disease poses a potential serious threat to the performance of the agricultural industry if the current epidemiological and geographic distribution status in South Africa changes.
5. Trade sensitive: The disease can be regarded as a highly trade sensitive issue and poses a potential serious threat to South Africa's International trading status.
6. According to the Draft Policy on Categorization of Animal Diseases a disease should comply with at least three of the five selection criteria in order to qualify for inclusion in the list of controlled animal diseases. Diseases that do not occur in South Africa (absent) automatically qualify as controlled animal diseases according to Act 35 of 1984. However, these diseases will be listed specifically in the table of controlled diseases only if they require active preventative control measures.
7. Primary Animal Health Care Programmes: According to the proposed policy, the initial programmes should target, as a priority, diseases and conditions that are easy to control by preventative measures (like vaccination, dipping or deworming), especially if they are known to have a serious impact on livestock production in a particular area. In addition the controlled animal diseases should be included, particularly those that are controlled predominantly by prescribed preventative measures.
8. According to the Animal Diseases Act 35 of 1984

Diseases OIE listed diseases and other diseases that are	**Classification criteria for controlled animal diseases according to policy**					**Categorization as Controlled Animal Disease [6]**	To be targeted for **PRIMARY Animal Health Care**	**Comments**
	Zoonosis [1]	Rapid spread [2]	Collective control [3]	Threat to industry [4]	Trade sensitive [5]			

known to be of concern in South Africa							**Programmes** [7]	
Aujeszky's disease		X		X	X	X		Absent but active control required.
Bluetongue		X	X	X	X	X (notifiable)	X	
Brucellosis *(Brucella abortus)*								
Brucellosis *(Brucella melitensis)*	X	X	X	X	X	X	X	
Brucellosis *(Brucella suis)*	X		X	X	X	X		Absent but active control required.
Crimean Congo haemorrhagic fever	X							Endemic. No symptoms of disease in animals.
Echinococcosis/hydatidosis	X			X			X	
Foot and Mouth disease		X	X	X	X	X	X(in all areas)	
Heartwater				X			X	
Japanese encephalitis		X	X	X	X	Absent		
Leptospirosis	X				X		X	
New world screwworm *(Cochliomyia hominivorax)*		X	X	X	X	Absent		
Old world screwworm (Chrysomya bezziana)	X			X			X	
Paratuberculosis	X		X	X	X	X	X	
Q fever	X	X					X	Endemic. No symptoms of disease in animals.
Rabies	X		X		X	X	X	
Rift Valley Fever	X	X	X	X	X	X (notifiable)	X	
Rinderpest		X	X	X	X	X		Absent but active control required.

Trichinellosis	X		X				X	*Very rare*
Tularemia	X	X	X	X	X	Absent		
Vesicular stomatitis		X	X	X	X	Absent		
West Nile fever	X		X					South African form of disease is not a problem

CATTLE DISEASES AS LISTED BY THE OIE

Diseases OIE listed diseases and other diseases that are known to be of concern in South Africa	**Classification criteria for controlled animal diseases according to policy**					**Categorization as <u>Controlled Animal Disease</u>** [6]	To be targeted for **<u>PRIMARY Animal Health Care Programmes</u>** [7]	**Comments**
	Zoonosis [1]	Rapid spread [2]	Collective control [3]	Threat to industry [4]	Trade sensitive [5]			
Bovine anaplasmosis				X			X	
Bovine babesiosis				X			X	
Bovine genital campylobacteriosis				X			X	
Bovine spongiform encephalopathy	X		X	X	X	X	X	Absent but active control required.
Bovine tuberculosis	X		X	X	X	X	X	
Bovine viral diarrhoea				X	X		X	
Contagious bovine pleuropneumonia		X	X	X	X	X		Absent but active control required.
Enzootic bovine leukosis				X			X	
Haemorrhagic septicaemia				X			X	
Infectious bovine rhinotracheitis/infectious pustular vulvovaginitis				X			X	
Lumpy skin disease		X		X	X	X (notifiable)	x	

Malignant catarrhal fever			X	X	X	X (notifiable)		Absent but active control required.
Theileriosis (East Coast fever)			X	X	X	X		
Theileriosis (Corridor disease)			X	X	X	X	X (certain areas)	
Trichomonosis				X			X	
Trypanosornosis (tsetse-transmitted).	X		X	X	X	X	X (certain areas)	

SHEEP AND GOAT DISEASES AS LISTED BY THE OIE

Caprine arthritis encephalitis		X	X	X	X	Absent		
Contagious agalactia		X	X	X	X	Absent		
Contagious caprine pleuropneumonia		X	X	X	X	Absent		
Enzootic abortion of ewes (ovine chlamydiosis)				X			X	
Maed i-visna								
Nairobi sheep disease		X	X	X	X	Absent		
Ovine epididymitis (Brucella ovis)				X			X	
Peste des petits ruminants		X	X	X	X	Absent	X	
Salmonellosis (*S*. Abortus ovis)		X	X	X	X	Absent	X	
Scrapie	X?		X	X	X	X		Absent but active control required.
Sheep pox and goat pox		X		X	X	Absent		

EQUINE DISEASES AS LISTED BY THE OIE

African horse sickness		X	X	X	X	X		
Contagious equine metritis		X		X	X	X		Absent but active control required.
Dourine			X	X	X	X		
Equine	X	X	X	X	X	Absent		

encephalomyelitis (Eastern)								
Equine encephalomyelitis (Western)	X	X	X	X	X	Absent	X	
Equine infectious anaemia	X	X	X	X	X	Absent		
Equine influenza		X		X			X	
Equine piroplasmosis				X			X	
Equine rhinopneumonitis				X			X	
Equine viral arteritis			X	X	X	X		Absent but active control required.
Glanders	X	X	X	X	X	X		Absent but active control required.
Surra (Trypanosoma evansi)		X	X	X	X	Absent		
Venezuelan equine encephalomyelitis.	X	X	X	X	X	Absent		

SWINE DISEASES AS LISTED BY THE OIE

African swine fever		X		X	X	X	X (in all areas)	
Classical swine fever		X	X	X	X	X	X (in all areas)	
Nipah virus encephalitis	X	X	X	X	X	Absent		
Porcine cysticercosis	X						x	
Porcine reproductive and respiratory syndrome			X	X	X	X		
Swine vesicular disease		X	X	X	X			Absent but active control required.
Transmissible gastroenteritis		X	X	X	X			Absent but active control required.

AVIAN DISEASES AS LISTED BY THE OIE

Avian	X		X	X		X	X	

chlamydiosis								
Avian infectious bronchitis				X			x	
Avian infectious laryngotracheitis				X			X	
Avian mycoplasmosis (Mycoplasma gallisepticum)				X			X	
Avian mycoplasmosis (Mycoplasma synoviae)				X			X	
Duck virus hepatitis		X		X	X	Absent		
Fowl cholera (pasteurella multicida)				X			X	
Fowl typhoid (salmonella gallinarum		X	X	X	X	X	X	
Avian influenza (HPAI and LPAI)	X	X	X	X	X	X	X	
Infectious bursal disease (Gumboro disease)		X		X			X	
Marek's disease				X			X	
Newcastle disease		X	X	X	X	X	X	
Pullorum disease (salmonella pullorum)		X		X	X	X	X	
Turkey rhinotracheitis				X			X	

LAGOMORPH DISEASE AS LISTED BY THE OIE

Myxomatosis		X	X	X	X	X	absent	
Rabbit haemorrhagic disease.		X	X	X	X	X	absent	

BEE DISEASE AS LISTED BY THE OIE

Acarapisosis of honey bees		X	X	X	X	X	absent	
American foulbrood of honey bees		X	X	X	X	absent		

European foulbrood of honey bees		X	X	X	X	absent		
Small hive beetle infestation (*Aethina tumida*)		X	X	X	X	absent		
Tropilaelaps infestation of honey bees		X	X	X	X	absent		
Varroosis of honey bees				X			X	

OTHER DISEASE AS LISTED BY THE OIE

Camelpox				X		Absent		
Leishmaniosis	x			x		absent	X	Not a problem of in SA

OTHER DISEASE NOT LISTED BY THE OIE

Besnoitiosis		X		X			X	
Blackquarter (Quarter-evil)				X			X	
Botulism				X			X	
Bovine cysticercosis	X			X			X	
Bovine mastitis		X		X			X	Insidious disease, costly to the country
Brucella canis	X				X		X	
Canine distemper				X			X	
Colibacillosis		X		X			X	
Duck virus enteritis		X		X	x	Absent	X	
Erysipelas	X	X		X		X (notifiable)	X	
Footrot		X		X			X	
Fowl pox				X			X	
Lice				X			X	
Malignant oedema				X			X	
Mange		X		X			X	
Orf				X			X	
Paratyphoid	X	X		X			X	
Pasteurellosis in sheep		X		X			X	
Plant poisonings				X			X	
Pulpy kidney disease		X		X			X	
Salmonella enteriditis	X	X	X	X	X	X	X	
Sheep scab		X	X	X		X	X	

Skin conditions in sheep		X	X	X		X	X	
Tetanus	X			X			X	
Three-day stiffness disease		X		X			X	
Tick-worry		X		X			X	
Verminosis		X		X			X	

FISH DISEASE AS LISTED BY THE OIE ANIMAL HEALTH CODE

Epizootic haematopoietic necrosis		X	X	X	X	X		Absent but active control required
Infectious haematopoietic necrosis		X	X	X	X	X		Absent but active control required
Spring viraemia of carp		X	X	X	X	X		Absent but active control required
Viral haemorrhagic septicaemia		X	X	X	X	X		Absent but active control required
Infectious salmon anaemia						absent		
Epizootic ulcerative syndrome		X		X	X	X		
Gyrodactylosis (Gyrodactylus salaries)						Absent		
Red Sea bream iridoviral disease						Absent		
Infectious pancreatic necrosis		X	X	X	X	X		Absent but active control required
Koi herpesvirus disease								

FISH DISEASE NOT LISTED BY THE OIE ANIMAL HEALTH CODE

Bacterial Kidney disease		X	X	X	X	X		Absent but active control required