

Synergies between veterinarians and para-professionals in the public and private sectors: organisational and institutional relationships that facilitate the process of privatising animal health services in developing countries

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Summary

The delivery of veterinary services in most developing countries was, until recently, considered to be the responsibility of the public sector. However, over the past four decades, economic constraints and the imposition of structural adjustment policies (SAPs) have led to a gradual decline in public sector investment in real terms and thus a reduction in the quality and quantity of services available to livestock keepers. Many governments acknowledged that they were no longer able to provide services that were essentially of a 'private good' nature and introduced radical policy changes which sought to introduce the concepts of a market orientated approach towards agriculture and livestock production in particular. The role of government, in the future, would be to provide a reduced range of essential 'public good' services and to create a favourable environment in which the private sector could become established as a provider of 'private good' services and at the same time act as a partner in carrying out certain public functions under contract or 'sanitary mandates'.

In almost all developing countries, however, these policy changes were not accompanied by appropriate development strategies. The reasons for this are complex. Firstly, SAPs may be considered to have been foisted upon governments by donors and are thus perceived by many policy-makers as the cause of financial problems, rather than a solution to them. Secondly, most animal health senior policy-makers in the public sector have been trained as veterinarians and lack the required management skills to plan change effectively. Furthermore, as regards clinical veterinary service delivery, especially in rural or more remote areas, the solution fostered by donor investment, which involves deregulation and the deployment of privately operating para-professionals, is often perceived as a threat to the veterinary profession and might result in limiting access to international markets for the trade of livestock and livestock products. An informal delivery system has gained a foothold in many developing countries in the absence of a well-planned strategy for the privatisation of animal health services. Most governments would now acknowledge that this presents a greater risk than the deployment of well-regulated and effectively supervised para-professionals.

This paper explores some of the principal challenges facing policy-makers in their efforts to bridge the transition from full state provision of animal health services to the formation of a partnership with the private sector. Governments and donors need to take active steps to facilitate the process of privatisation of

animal health services, especially those targeting the poorer rural subsistence and pastoralist farming systems. This would entail an initial investment in developing the necessary management skills at all levels in the delivery system. Thereafter, further investment would be required to allow the changes to be managed using tools such as the strategic planning cycle.

Should sufficient resources be made available to allow the full participation of all stakeholders in the delivery of animal health services, appropriate institutions and effective organisational relationships addressing all the more important issues will have to be identified.

The paper then proceeds to describe how different livestock production systems determine the level of demand for animal health services. If these services are to be provided on a financially sustainable basis, they must be tailored to meet actual rather than perceived demand. Identifying an appropriate model for animal health service delivery thus requires careful analysis of the production system to be targeted. Governments and donors can play a useful role in providing resources for this type of study as well as for appropriate market studies, business planning, training and access to soft loans.

Finally, as regards regulation, as the law stands today, many activities currently practised by para-professionals are classified as 'acts of veterinary medicine or surgery' and may only legally be performed by qualified and registered veterinarians. The concept of 'principal' and 'subsidiary' legislation provides the necessary flexibility in the regulation of the delivery of animal health services to accommodate the rapid changes taking place in this environment today.

Deregulation involves the delegation of responsibility for the performance of a defined range of veterinary interventions to para-professionals under the 'supervision' or 'direction' of a registered veterinarian. The author illustrates how the experiences of a number of projects in Tanzania were used to propose a definition of 'supervision' in law. The definition offers an opportunity to overcome the fear of compromising standards of delivery of animal health services through the deployment of para-professionals. In addition, such functioning provides employment opportunities for private veterinarians in rural areas where access to formal primary animal health services would otherwise be denied and may contribute to the process of quality assurance of national veterinary services in developing countries.

Keywords

Delivery system – Developing country – Legislation – Veterinary service.

Introduction: the evolution of animal health service delivery by private sector para-professionals under professional supervision

Until recently, animal health service delivery has been largely the responsibility of the public sector in most, if not all, developing countries. However, over the past four decades, economic pressures brought about by poor economic performance, dramatic rises in the costs of essential imports,

especially oil, and a drop in the value of exports, particularly agricultural commodities, left many governments with little choice but to accept structural adjustment policies (SAPs), linked to International Monetary Fund and World Bank (WB) loans.

Structural adjustment policies sought to increase the role of the private sector in providing commercially based services that had, until recently, been provided by the public sector. The rationale behind this policy was that market orientated economies and any form of private enterprise would be likely to outperform the public sector (17).

In the agricultural sector and especially the livestock sector, SAPs have resulted in reduced investment in capital and

recurrent expenditure. As Bazeley reported in 1992, the number of state-employed animal health service providers per unit of livestock production in developing countries more than doubled during the preceding ten years whilst their productivity halved due to inadequate budgetary increases to accommodate the field operational costs of the expanding workforce (3). This has left an institutional vacuum in the supply of animal health services and veterinary inputs in the rural and more remote areas of most developing countries, where the majority of livestock are to be found (22, 23). The casual stance adopted by many governments, allowing the privatisation process to evolve passively, has resulted in this vacuum being filled by informal delivery systems that give livestock keepers ready access to prescription only medicines, often of questionable quality, which they administer to their animals themselves with insufficient regard for informed diagnosis or correct treatment regimens (6, 10, 22, 32), or to donor/non-governmental organisation (NGO)-supported programmes involving the deployment of para-veterinary professionals, including community-based animal health workers (CAHWs). Both systems, whether informal, as in the case of drug vendors, or semi-formal, as are the NGO project-supported initiatives involving para-professionals, have led to concerns about the risk of drug resistance and drug residues being found in livestock products destined for human consumption (6, 12, 30).

The proliferation of community-based animal health service projects which aim to fill the gap left by the contraction of state veterinary services in remote or underserved rural areas through the empowerment of local communities stems from WB-led initiatives in the mid 1980s (7, 8). The approach was conceived as a rational solution to economic pressures to privatise clinical animal health services, but was also a response to strong consumer demand.

The apparent high success rates of such initiatives reported in the literature (4, 14, 18, 20) may in part be due to the participatory techniques employed for their establishment and the resultant high levels of community ownership (4) or, perhaps, simply to a realisation, on the part of the beneficiaries, of the rapid economic returns that can be derived from modest investments in basic preventive and curative animal health interventions (27). Irrespective of the reasons, there is strong evidence that the community-based approach to animal health service delivery in many rural areas where, for complex socio-economic and demographic reasons, conventional professional veterinary services are untenable, is having a profound impact on the livelihoods of direct beneficiaries as well as a broader indirect impact on the quality of national animal health services (20).

The establishment of para-veterinary and community-based animal health service delivery systems does, however, pose

serious questions concerning their legality, since, as the law stands today in most developing countries, many of the services provided by para-professionals, including the diagnosis and treatment of sick animals and the use of prescription only medicines, are considered as 'acts of veterinary medicine' which may only be provided by registered veterinarians.

In many countries, the deployment of para-professionals and CAHWs is therefore considered a threat to the veterinary profession for a number of reasons. Not least amongst these is that many of the changes proposed to accommodate para-professionals and CAHWs within institutional and legal frameworks are being promoted by donors and NGOs whose influence in these affairs is resented (24). In addition, the perceived competition that would result if para-professionals were given the right to practice veterinary medicine is a strong disincentive to policy-makers who can influence the amendment of laws to accommodate this category of workers. For this reason, professional bodies such as veterinary associations are naturally inclined to protect the interests of their members by opposing any changes which might erode their control of the market for services and veterinary inputs. This position may in part be due to a lack of understanding of the way in which private veterinary practice models may operate in the future. All those agencies which have begun to explore organisational and institutional relationships have understood that para-professionals, including CAHWs, must be properly regulated by a statutory body and, where possible, be supervised by a registered veterinarian. The establishment of local networks of para-professionals thus presents an employment opportunity rather than a threat for an enterprising veterinarian.

The following section of this paper highlights some of the principal issues facing policy-makers regarding the privatisation of animal health services in underserved areas. The section on livestock production systems then describes how some of the more important socio-demographic characteristics of these systems determine the levels of demand and willingness of livestock keepers to pay for animal health services, i.e. the existing market opportunities. A careful analysis of these same factors will determine the level of services and thus the shapes of the models that are likely to be sustainable for each production system at the current state of economic development. In many localities, in the foreseeable future, the market demand will be such that a network of para-professionals and CAHWs, under the supervision of a registered veterinarian or perhaps an animal health assistant (AHA) in the case of more remote areas, will be the only financially sustainable model for allowing farmers access to primary animal health services (22, 24).

The formulation of organisational and institutional relationships to set standards to ensure the quality of veterinary

services cannot be prescribed by donors or consultants provided by them for the reasons mentioned above (24). The role of such organisations should be to facilitate a process of change by providing the necessary incentives to allow dialogue to take place through stakeholder participation (34). As with the establishment of service delivery systems at the farm gate, a well-planned process of stakeholder consultation, which requires considerable (donor) investment, is more likely to result in the formulation, acceptance, establishment and ownership of appropriate institutions and organisational relationships which meet the specific needs of each particular situation. Whilst many such institutions exist in northern countries, which has resulted in the professional delivery of animal health services being well regulated and highly respected, direct replication of these institutions may not necessarily be the most appropriate solution for developing countries. A more innovative approach may be required to instil an ethic of professionalism amongst all levels of service provider from the graduate veterinarian down to the CAHW and livestock keeper.

Regarding veterinary legislation, policy-makers must imperatively equip themselves with tools which are sufficiently flexible to respond to the rapid changes taking place and giving rise to the commercialisation of currently regarded 'subsistence' levels of livestock production in most of the more traditional production systems common to remote or poorer rural areas. A more market orientated approach involving higher levels of investment and increased productivity, leading to higher rates of offtake in these production systems in the future will most certainly fuel increasing demands for higher levels of technology which can only be provided by better trained service providers. Whilst CAHWs and para-professionals are essential ingredients of animal health service delivery systems in many parts of the world today, demands are likely to change as the risks of loss diminish and livestock keepers become better informed and more successful.

The final section of the paper discusses the concepts of 'principal' and 'subsidiary' legislation. Examples are given as to how this form of legislation may be used to accommodate the definition of the different cadres of animal health service providers and the range of veterinary interventions that they may practice under professional supervision. The key issue arising out of the delegation of responsibility by a professional supervisor to allow para-professionals to provide services which are considered in law as 'acts of veterinary medicine and surgery' is the definition of 'supervision'. A suggestion is made that the definition may provide an opportunity to ensure that the quality of services and the supply of veterinary medicines through the agency of para-professionals (when treating sick animals) is of an acceptable standard and can actually contribute to the overall evaluation of the quality of veterinary services. The OIE (World organisation for animal health)

considers such evaluation as a mandatory pre-condition in the process of risk assessment when an importing country wishes to enter into a trade agreement for the supply of livestock or livestock products from an exporting country (26).

Challenges and opportunities: the issues resulting from deregulation and the development of sustainable animal health service delivery systems

Under current policy reforms, the future role of government veterinary services will be to provide services that are largely of a 'public good' nature. On the other hand, the private sector is expected to provide 'private good' services and to assist the government through service contracts or 'sanitary mandates'. During the transition from public to private sector participation, the provision of some services will inevitably be shared between the public and private sectors. Table I lists some of the principal public, private and shared roles for the delivery of animal health services.

Redefining the roles of the various actors involved in the delivery of animal health services is challenging because most policy-makers will be expected to explore new territory. The path towards privatisation is unknown and the shape of future relationships unclear. Almost all policy-makers in the public livestock sector are trained as veterinarians and lack the management skills required to direct such a complex process of change. There is thus a need to invest in developing capacity at this level.

However, the process of reform presents an opportunity for the development of new partnerships between the public and private sectors by building organisational relationships between the institutions representing the interests of each stakeholder.

Separation of commercial and regulatory interests between the private and public sectors, however, presents a serious conflict of interests to many veterinarians in developing countries, most of whom are currently employed in the public sector. As government services have declined, many state-employed veterinarians and para-professionals have adopted the dual roles of state and private veterinarian (18), supplementing their meagre incomes through the private delivery of limited services and to a much greater extent, the sale of veterinary inputs directly to livestock keepers (23). The subsidy offered by States involving the provision of various resources to State

Table I
The roles of the public and private sectors as partners in the delivery of animal health services

| Public sector roles | Shared public/private sector roles | Private sector roles |
|--|--|---|
| Formulation of livestock development policy Prevention and control of major epidemics and livestock diseases of national importance Livestock movement control, certification, quarantine, etc. Disease surveillance and reporting National/regional/local laboratory diagnostic/disease investigation services Creation of an enabling environment for the privatisation of animal health services, especially those targeting poor livestock keepers in rural or remote areas Contracting private service providers to perform certain public functions ('sanitary mandates') Co-ordination of donor/NGO assistance Quality assurance of delivery of animal health services: Regulation and monitoring of the provision of clinical animal health services Regulation of the import, supply and use of veterinary medicines, vaccines and biologicals Regulation of the import and export of livestock, livestock products and all biologicals Public health services ensuring the quality of livestock products destined for human consumption Research and training in animal health and production | Training of all veterinary cadres Artificial insemination – semen production and distribution Marketing of livestock Animal health and production extension Public health – meat inspection Local vaccine production Laboratory diagnostic services Research of a private good nature | Clinical services including: The diagnosis and treatment of sick animals Vaccination services for private good diseases Providing advice on, and being a source of, other preventive interventions and inputs Management of physical injuries and first aid Surgical procedures Management procedures such as castration, hoof trimming and dehorning Artificial insemination services The supply of all veterinary inputs In partnership with the public sector: Livestock production and health extension services Under 'sanitary mandate' contract: Vaccination against public good diseases Livestock disease surveillance Outbreak investigation services, e.g. sample collection Health inspection for movement permit certification Reporting outbreaks of List A diseases Meat inspection |

NGO: non-governmental organisation

veterinarians such as transport facilities, equipment and payment of field allowances for visiting livestock keepers tends to deter state veterinarians from taking the risk of going private (16). This situation is almost certainly one of the reasons for the stance adopted by many policy-makers in defending the monopoly conferred on the veterinary profession by existing legislation. At present, many young, would-be private veterinarians, who can no longer find jobs in the public sector, are deterred from entering into private practice in rural areas for fear of fierce competition from state veterinarians and existing and former state-employed para-professionals (15) and the increasing number of casual drug vendors (34). Once the roles of the State and the private sector are defined, the State should withdraw and allow the private sector the opportunity to work on a level playing field. The challenge facing state veterinary services is to provide sufficient incentives to those remaining in the service as regulators and inspectors that they are not obliged to engage in commercial, or perhaps corrupt, activities as a means of supplementing their incomes.

Whilst private veterinary practice involves longer working hours and greater risk, civil service reform must nevertheless allow public sector employees to receive similar levels of income as those enjoyed by private sector service providers with the same educational status.

In the absence of a defined implementation strategy, many governments in developing countries have allowed the process of privatisation of animal health services to evolve passively. This has led to a number of serious problems, not only at the farm gate but also at the policy and institutional levels. As mentioned previously, in the absence of a readily accessible service provider, livestock keepers will tend to try to treat their animals themselves (6, 34). This has created a 'black market' for services and input supplies where livestock keepers tend to opt for the cheapest that money can buy (1, 19, 22). In such situations, the market for licensed service providers becomes distorted and strict enforcement of legislation will be required in order to allow the development of a formal delivery system.

Although cost is the most obvious factor limiting the demand for animal health services, many other factors including physical distance between service provider and consumer, social distance (educational level, status and gender) and access to information, which are termed as 'transaction costs', exist. For instance, in Zimbabwe, where para-professionals are forbidden to carry medicines to treat sick animals, Woods found that as physical distance between service provider and livestock keeper increased, the latter were less inclined or able to seek the services of the former (33). Equally importantly, service providers were less able or sometimes less willing to visit farmers twice – once to make the diagnosis and the second time to perform the treatment after the prescribed drug had been purchased by the owner of the sick animal – and preferred to prescribe medicines on the basis of a description of the symptoms, to be used by the owner himself. Leonard (18) and Ly (22) provide detailed descriptions of how transaction costs affect demand from livestock keepers and the ability to supply services by service providers. The success of the para-professional and community-based approach to the delivery of animal health services can be attributed to the fact that transaction costs are reduced to a minimal level and beneficiaries are provided with very rapid and visible benefits.

Some of the reluctance of policy-makers in accepting the need for privately operating para-professionals stems from a lack of understanding of these socio-economic issues. The development of a privatisation strategy must therefore involve all stakeholders from the very beginning of the process to ensure that these issues are well understood and thus appropriately addressed.

In addition to transaction costs, the sustainability of animal health delivery systems targeting remote or poor livestock keepers is determined to a large extent by the financial returns that can be made on the investment required to establish and maintain the service. The salaries of service providers, the replacement of equipment and veterinary inputs, vehicle operating costs, office running costs, security and utilities all represent overheads that must be met from income generated from the sale of services and drugs. Furthermore, in many instances would-be private veterinarians are unable to enter into private practice through the agency of a partnership with various cadres of para-professionals without taking a loan from a credit institution. Under current market conditions, the interest rates normally charged by commercial banks are excessive relative to the possible margins in private veterinary practices, especially those serving remote or poor livestock owning communities in rural areas. Donor organisations and NGOs may offer small enterprise development packages including market studies, business feasibility studies, business management training, business planning and access to 'soft' (low interest) credit.

Many of the functions of the public sector are only performed at irregular intervals or may only detain the particular

functionary for a limited period of time in a working day. Some of these tasks could therefore be contracted to a private sector service provider through the award of service contracts or 'sanitary mandates', and thus improve the efficiency of the provision of those services. In addition, sanitary mandates will almost certainly also enhance the financial viability of a two- or three-tiered veterinary practice model, which is likely to be the only sustainable form of animal health service delivery system in many remote or poor rural areas of developing countries.

The deployment of para-professionals, including CAHWs, and providing livestock keepers in many remote or rural areas access to primary animal health services and veterinary inputs can undoubtedly have a major impact on livestock production systems (20). Governments of developing countries that have decided to give poor livestock keepers access to primary animal health services must rapidly evolve implementation strategies and set standards to guide the processes of privatisation and formulation of legal frameworks for regulating the delivery of these services and the supply of prescription only medicines under professional supervision.

The privatisation process must be planned and implemented in such a way that all actors clearly understand the roles of the other stakeholders. In addition, the appropriate organisational and institutional relationships must operate in a way that ensures that service quality is maintained, while at the same time being delivered to as many livestock keepers as possible in an affordable manner.

Livestock production systems: how they determine supply and demand for animal health services and the design of sustainable delivery systems

Livestock production systems are largely a product of the environmental conditions that prevail in any particular locality or region. The principal geophysical characteristics that determine farming systems are soil type, rainfall quantity, periodicity and quality, ambient temperature and topography. In higher rainfall areas where crop production is the primary farming enterprise, livestock generally occupy a supporting role in the production system, although draught power, which is difficult to quantify in terms of value of contribution to a production system, is an extremely important component of many mixed farming enterprises. However, in urban and peri-urban areas, where there is a strong demand for milk and eggs and marketing opportunities are enhanced by better infrastructures, small to medium scale dairying and medium to

large scale poultry production systems become the norm. As wealth and educational status within the farming community increase and economic growth drives the need for greater efficiency, farming systems tend to grow in terms of scale, capital investment and returns.

Large scale commercial dairying, commercial beef, pig or poultry production systems which demand high standards of veterinary service inputs have become well established in a large number of developing countries over the years. In other countries, which are enjoying relatively recent strong economic growth, such systems are only now becoming more common. In commercial production systems, the prevention and control of livestock disease is complicated by the effects of intensification. Investment in animal health interventions is based on a critical analysis of cost to benefit ratios. Such systems require advanced veterinary technology which can only be provided by experienced veterinary graduates.

Over the past twenty to thirty years, in medium rainfall areas and particularly at the urban/peri-urban interface, smallholder farmers have become increasingly familiar with more advanced technology and are intensifying their livestock production systems. This is in response to population density pressures as well as the need to satisfy market demands for milk, poultry and pork meat and eggs.

The livestock components of these production systems require regular vaccination against the more important diseases affecting each species, artificial insemination for dairy cows, advice on breeding conditions, and sometimes technical advice on management and nutrition, most of which can be best given by a veterinarian or an AHA with two to three years of training (certificate or diploma in animal health and production) under close supervision of the veterinarian. However, many day-to-day clinical procedures such as the diagnosis and treatment of commonly occurring diseases and routine first aid or management procedures such as dehorning and castration of calves can easily be carried out by the AHA alone. A veterinarian who gives technical, backstopping support and continuous in-service training to a small team of AHAs under his supervision is likely to become the most cost-effective animal health service delivery system for medium scale smallholder producers in medium to high potential areas where access to markets is relatively good. Such systems have been operating informally for many years in much of Kenya in the medium potential areas to the north and north-east of Nairobi, and in some areas of Uganda. Unfortunately, due to lax enforcement of legislation, which is supposed to restrict the sale and use of prescription only medicines, many of the 'practices' do little more than sell drugs to livestock keepers over the counter, without actually providing a clinical, diagnostic or curative service. When a veterinarian or an AHA is not available and the livestock keeper can purchase drugs readily over the

counter, he will inevitably attempt to treat his animals himself. For this reason, the financial viability of private practices is at best tenuous and relies heavily on sales of drugs and agro-chemicals (24, 31).

In many developing countries, the shape of farming systems changes rapidly as soon as the 'rural' areas are entered as a direct consequence of lower or less reliable rainfall patterns, poor infrastructures, lower levels of education amongst the rural population, physical and social distance from potential service providers and most importantly, distance from markets for livestock products, particularly milk and eggs. In many such rural areas the typical farming enterprise is a mixture of cereal or cash crop production for home consumption and local sale with livestock integrated for a variety of purposes.

In these mixed crop/livestock production systems, indigenous knowledge of livestock disease tends not to be as extensive as in pastoralist systems. However, livestock keepers are able to recognise many of the more common diseases affecting their livestock and would want to have access to modern medicines to treat them. In the absence of a formal, trained animal health service provider in most of these areas, almost all farmers purchase drugs from any, and usually the cheapest, source available. A thriving black market has therefore developed, often with the tacit co-operation of state-employed veterinary personnel who are frequently a secondary source of drugs purchased from wholesalers at larger urban or provincial capitals. In these systems, the transaction costs of physical distance, social distance and access to markets determine the shape of demand for animal health services. Potential 'practice' operating costs, human/livestock density and how much livestock keepers are able and willing to pay for services and inputs must be carefully analysed before the structure of a sustainable, financially viable delivery system can be predicted with any certainty. An in-depth analysis of 'willingness to pay' is provided by Hooton *et al.* (11).

In a study undertaken in Zimbabwe by Odeyemi, to determine the effect of reduced state subsidy on government-run veterinary practices, the author calculated the minimum revenue required to support the salaries and average (national) practice operating costs of veterinarians. This was termed the 'veterinary coefficient' (VC) and was compared with the likely revenue that could be generated through the provision of animal health services and drug sales, calculated on the basis of the number of animals within the practice catchment area, the average distance from the practice centre to clients (the travelling costs) and the average amount livestock keepers were prepared to invest in the health of their various livestock holdings. Odeyemi concluded that for any practice, if the ratio of the potential revenue to the VC was equal to or greater than one, then the practice would be likely to be financially viable. On the basis of these calculations, the author predicted that,

after the withdrawal of government subsidies, only 38 of the existing 63 practices (60%) in Zimbabwe would be financially viable. Under these circumstances, 53% of the national herd would not be covered by veterinary services at all. Two thirds of the non-viable practices actually attempted to serve exclusively 'communal' (smallholder) herds. This meant that whilst 70% of commercial herds would continue to receive services after the withdrawal of government subsidies, less than 36% of communal herds would receive any veterinary services. In areas where conventional practice models were not financially viable, CAHWs with lower earnings expectations and an additional source of income as a farmer (since CAHW duties would be part time), were argued to be the obvious solution to fill the service delivery gap (25).

In the drier areas which characterise much of sub-Saharan Africa and parts of central Asia, livestock are often the only economic means of utilising the sparse vegetation and water resources available. For this reason, the livelihoods of pastoralists and nomads depend almost exclusively upon their livestock holdings. Mobility is crucial to their survival. In such systems, the individual value of animals is low and annual offtake is also relatively modest. The systems are highly susceptible to climatic shocks and sometimes political instability or civil unrest. However, livestock keepers in these systems generally have an extremely well-developed indigenous knowledge of livestock disease and are aware of the value of some modern medicines although they often lack an understanding of how to take advantage of the technology and, most importantly, lack access to animal health service delivery systems. The demand for a professional level of veterinary services in such systems is thus generally weak, the need being principally for training on how to utilise modern technology in an appropriate way and for access to a reliable supply of quality assured basic veterinary inputs. In these production systems, demand for animal health services is especially conditioned by transaction costs such as social and physical distance, more so than in the more advanced production systems discussed above. Encouragingly, however, as and when services become available in such systems, livestock keepers rapidly respond to the obvious benefits derived from investing in successful interventions. Many good examples are reported in the literature, especially those recorded by Leyland and Catley (20).

In Kenya, in the far north of the country, which has been classified as arid and semi-arid lands (ASAL), two private practices based upon a three-tiered model of veterinarian and AHAs jointly supervising and supplying a group of CAHWs were reported as having collapsed due to non-viability (29). On the basis of this experience, the Kenya Veterinary Board (KVB) now considers that AHAs, with their lower earnings expectations, rather than veterinarians, can be licensed to be the sole supervisors and suppliers of CAHWs in the ASAL. A similar trend may be emerging in Afghanistan, where the

financial viability of veterinary field units is being questioned as donor/NGO subsidy, in the form of salary support, is withdrawn.

Each individual farming system thus demands a different model for the delivery of animal health services. The structure of the most appropriate model will be determined after careful analysis of factors such as willingness and ability of livestock keepers to pay, and above all, the transaction costs that characterise the particular production system.

Table II illustrates how, based on potential for demand for animal health services and veterinary inputs, livestock production systems can be grouped crudely into four major categories according to socio-economic and geophysical characteristics. These in turn determine the most appropriate model for the delivery of animal health services (Fig. 1).

There is a paucity of experience recording the financial viability of veterinary practice models in various farming systems in developing countries. Indeed, only relatively recently have donors, NGOs or governments shown any interest in testing the viability of such models. The little experience that does exist suggests that three basic models for service delivery are likely to be financially viable, and thus sustainable, for the four categories of livestock production systems crudely summarised in Table II. For the first two categories of production systems, a relatively high level of technology will be demanded (Models 1 and 2), although many of the simpler tasks can be carried out at less cost to the owner by a para-professional under the supervision or direction of a qualified veterinarian. At the other extreme, one or two AHAs supervising a large group of CAHWs is likely to be the only financially viable option for nomadic, pastoralist and some transhumant production systems.

Accurate figures for the average investment per tropical livestock unit within each production system are difficult to find in published literature on this subject. The figures given in column seven of Table II are crude estimates based on the experience of the author. Predicting the type of services and how much farmers are willing to invest in them is also difficult, but very necessary, if the supply of services is to be tailored to demand. Contingent valuation (CV) has been used to predict willingness to pay for animal health services by a number of authors but so far, no follow-up surveys have been undertaken to verify the theoretical demand of the farmers. The study carried out by Hooton in the Magu District of Tanzania, concluded that CV may well prove to be a useful means of predicting consumer demand for animal health services and thus provide an overall estimate of the level and type of service required (10, 11).

Table II
Selected socio-economic characteristics of livestock production systems in developing countries

| Livestock production system | Educational status of livestock keeper | Proximity/ access to markets | Wealth status of livestock keeper | Physical distance from service provider and means of transport | Social distance from professional service provider | Estimate of annual investment in health/ TLU (\$US) | Model of animal health service delivery |
|--|--|------------------------------|-----------------------------------|--|--|---|---|
| Large scale commercial enterprises: Commercial dairying Commercial poultry/pork production Extensive beef ranching Beef feedlotting Commercial water buffalo Companion animal practice | High | Good | Rich | Close (15 km-20 km) Car | None | 20-50 | Model 1: Veterinary graduate + AHA/nurse |
| Medium to small scale semi-modern urban/peri-urban enterprises: Medium to small scale dairy production Medium to small scale poultry production Smallholder small ruminant/ beef fattening Urban companion animals | Medium | Good | Well-off | Close (15 km-20 km) Motorcycle | Small/medium | 10-15 | Model 2: Veterinary graduate + AHA |
| Sedentary smallholder mixed crop/ livestock production systems – rural areas: Cereal/cash crops + dairy/beef/ draught cattle + small ruminants + backyard poultry Cereal/cash crops + small ruminants/ draught cattle/other draught horses and donkeys + backyard poultry Cereal/cash crops + small ruminants | Low | Poor | Poor | Distant (20 km-50 km) Motorcycle/ bicycle | Great | 5-10 | Model 3: Veterinary graduate + AHAs + CAHWs |
| Pastoralism, nomadism, transhumance – arid or semi-arid areas: Cattle, small ruminants, camels, donkeys, horses, mules, alpaca, llama and yak | Very low | Very distant | Poor | Remote (50 km-100 km) Foot | Very great | 0-5 | Model 4: AHAs + CAHWs |

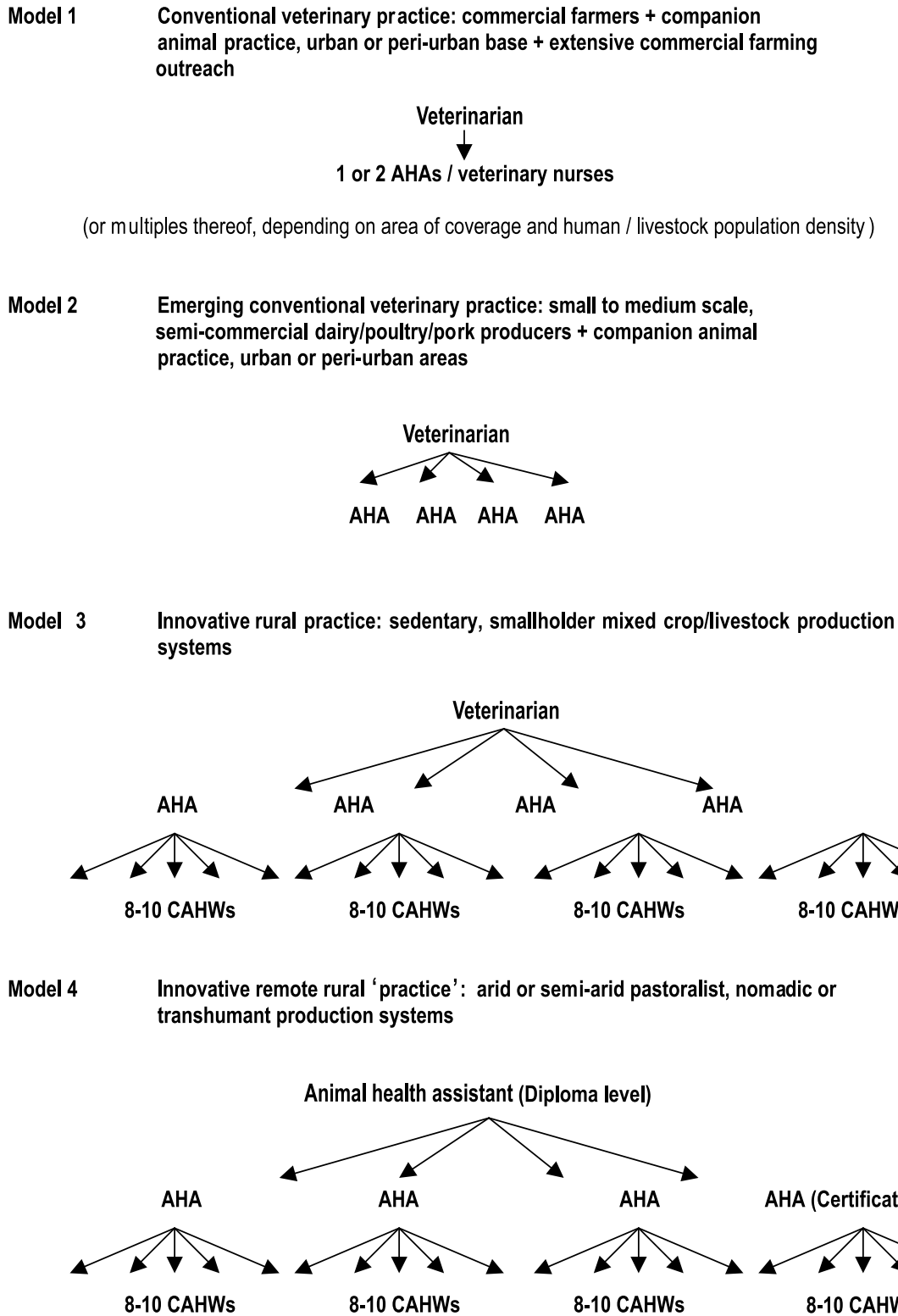
TLU : tropical livestock unit. A TLU of 250 kg is approximately equivalent to one adult bovine, eight small ruminants, 0.7 horses or 0.5 camels

CAHWs : community-based animal health workers

AHA : animal health assistant

In Tanzania, the Animal Health Services Project (AHSP) attempted to obtain accurate information on CAHW income from the sale of services and medicines to assist with developing a business plan for a private veterinary practice based on Model 3 (Fig. 1), by asking CAHWs to maintain activity record books. Whilst the records kept were almost certainly manipulated to reflect a lower level of turnover than

was actually the case, the data obtained would suggest that a financially sustainable practice could be built on this model. Over a period of one year from start-up, the average monthly turnover of sales within a group of 35 CAHWs was TShs (Tanzanian shillings) 34,276, equivalent to US\$40.32 and in a similar study undertaken in the Babati District of Tanzania over the same period, CAHWs were able to earn a net profit of



AHA: animal health assistant
 CAHW: community-based animal health worker

Fig. 1
Models of animal health service delivery

TShs30,000, equivalent to \$US35.3 per month (28) (TShs850 = US\$1.00). In a free market, the average mark-up on the sale of medicines used for treating sick animals during the AHSP project cited above was 120% (including a service fee), whereas the mark-up on drugs sold directly to farmers for their own use was only 34%. The average monthly margin over the cost of drugs earned by the same group of CAHWs was found to be TShs17,250, equivalent to US\$20.30, a margin of just less than 50% over the cost of inputs. The CAHWs considered this level of income to be a worthwhile contribution towards their overall household income. At the time this study was undertaken, the earning expectation of a private veterinarian was determined by questioning a group of state-employed veterinarians who were considering private practice as an alternative to state employment. The average monthly income expected was found to be US\$350/month, approximately double the salary of a state-employed district veterinary officer. Based on the average monthly turnover of CAHWs recorded above and assuming a network of fifty CAHWs would be established in a District and that these workers would be contractually obliged to purchase all their drugs from their supervisor, together with the expectation that a veterinarian might make a monthly income of not less than US\$350/month, a business plan was developed to support an application for credit to set up the practice. Unfortunately, donor support for the continuation of this study came to an end before a credit line could be implemented (1). The financial viability of private veterinary practice models from the perspective of a prospective private veterinarian will be determined, to a great extent, by the financial rewards he and the para-professionals he intends to work with expect to gain in return for the extra workload and the risks inherent to taking out a loan, including that of losing any property used as collateral.

The important characteristic common to each of the models in Figure 1 is that the practice manager is a qualified veterinarian or, in the case of Model 4, an experienced and mid-level trained AHA (three year diploma in animal health and production). Ideally, the relationship between the practice manager and subordinates should be defined by a contract (22) in which the words 'supervision' or 'direction' are specified in veterinary legislation (2). The quality of the services provided and the drugs supplied by para-professionals may indeed be guaranteed by such a definition. Underlying the quality assurance stemming from this type of contractual relationship is the understanding that the definition of supervision ensures a sufficient frequency of contact between the supervisor and the supervised person that the risks of malpractice or misuse of medicines is reduced to an acceptable level and that the para-professionals are willing to, and do, refer difficult or unfamiliar cases to their supervisor. The importance of the contractual relationship between para-professionals and the definition of supervision is detailed in the final section of this paper.

The formulation of institutional and organisational relationships for the delivery of animal health services by professionals and para-professionals working in the public and private sectors

The major apparent obstacles militating against the introduction of appropriate and sustainable animal health service delivery systems are as follows:

- a lack of management skills at all levels
- insufficient understanding on the part of policy-makers of the socio-economic factors that determine demand and which should, if allowed to operate more freely, thus shape the supply of animal health services
- a lack of, and inexperience in the employment of, institutional and organisational systems required to promote, facilitate, regulate, monitor and evaluate the process of veterinary privatisation.

The question therefore arises as to where to commence.

Livestock policy and livestock development strategy

The revision of livestock policies by many governments over the past two decades, resulting in a divestiture of responsibility for the delivery of certain services essentially of a 'private good' nature from the public sector towards the private sector, took place largely in response to SAPs imposed by donors. Unsurprisingly therefore, long delays have attended the adoption of these policies and their implementation. The advent of poverty-focused development strategies in the last decade has, however, attracted the interest of senior policy-makers to develop strategies which address the needs of the poor and in particular, poor livestock keepers. The incentive which sparked this interest is based on donors agreeing to give governments greater responsibility for managing their affairs through investment in direct budget support. The expected outputs from this new approach are good governance, transparency and accountability and above all, the realisation of democratic processes.

One of the guiding principles behind public sector policy is the role of safeguarding the interests of the public. In the context of the delivery of animal health services, perhaps the most important stakeholders are the consumers of livestock products. Of equal importance, and often neglected by policy-makers, are the interests of livestock keepers themselves.

Policy reform needs to be able to respond to consumer demand. This can happen if sufficient investment is available to allow appropriate organisational and institutional relationships to be developed through real stakeholder participation.

Implementing policy – change management

Once appropriate policy is in place, governments need to develop an implementation strategy. For almost all governments in developing countries, the process of privatisation is new and necessarily involves redefining the role of the public sector which, in turn, will require some important changes in structure. For many senior policy-makers, this poses a threat since certain members of the hierarchy are likely to lose position and power. However, if the process of change is managed carefully, new roles should be able to be found for most of those whose former responsibilities are no longer required.

The first step in the process of introducing change is to elaborate a structured planning process. In the world of business and industry, economic efficiency requires constant attention to management structure in response to market and global economic trends – upsizing and downsizing – according to demand. The same is true of animal health service delivery. Planning with the objective of improving efficiency is known as ‘change management’. This involves a continuous process of dialogue whereby all stakeholders have the opportunity to state their views and challenge those of others freely and without

reservation. One of the key tools for implementing change management is the ‘strategic planning cycle’ which embodies a process of stakeholder consultation at all levels of a production system. Figure 2 illustrates the key stages in a strategic planning cycle.

Using the strategic planning cycle for the privatisation of animal health services requires considerable investment in the planning stage of strategy development. This step is considered to be an essential component for determining the most appropriate elements of institutional and organisational change which will allow all stakeholder demands to be met and, most importantly, to be owned, especially as the process is an entirely new experience for most policy-makers.

The AHSP in Tanzania commenced a process of change management by identifying key tiers or groupings amongst the stakeholders involved in animal health service delivery. Each tier received help to plan the future independently. At appropriate intervals when certain milestones had been reached, representatives of the different tiers were brought together to share their experiences and to allow each other to understand the relationships that were beginning to form between themselves. In this way, stakeholders were able to understand their respective roles and responsibilities. Each group of stakeholders gradually realised they needed to form associations which would have collective responsibility to promote their respective interests (34).

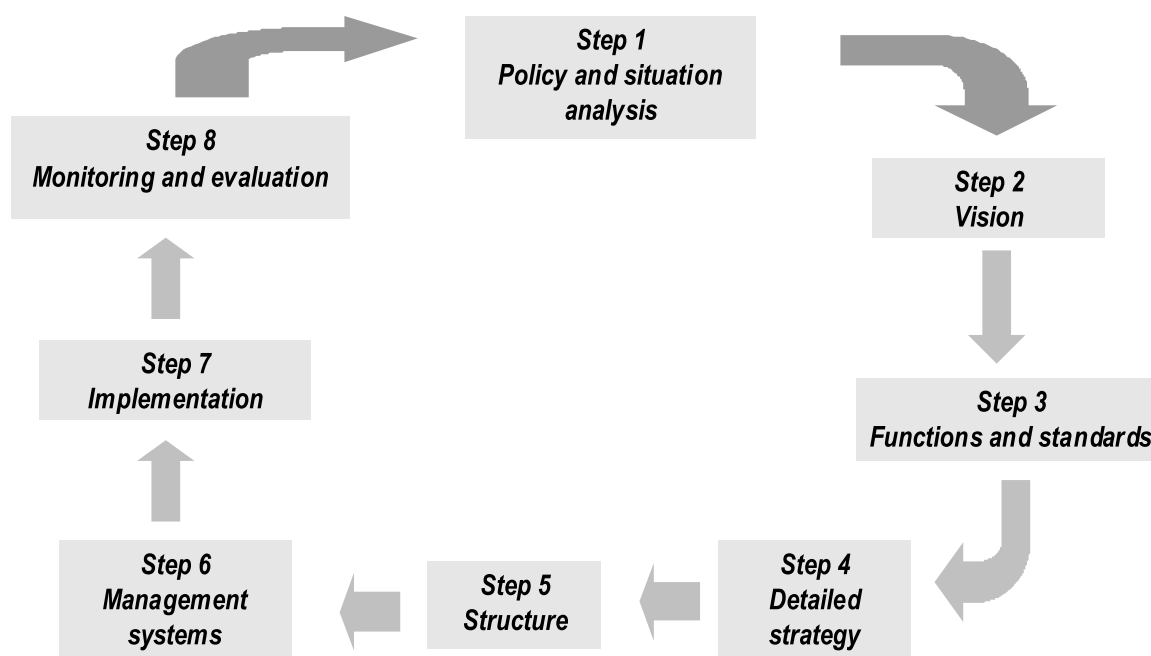


Fig. 2
The strategic planning cycle

Situation analysis

A planning process will only achieve a goal if all actors involved fully understand the needs of the other stakeholders. Policy-makers must therefore be given the opportunity to interact with livestock keepers on their own territory. In Ethiopia, recently, a dramatic increase in understanding on the part of senior policy-makers was brought about by enabling them to take part in a participatory evaluation of a number of community-based animal health programmes (13). The experience not only reinforced the importance of using participation as a means of sharing information between different levels of stakeholder interest, but also provided an opportunity for policy-makers to gain a better understanding of how some of the principal socio-economic constraints facing livestock keepers shaped their demand for services. This made policy-makers realise that to allow livestock keepers in remote areas access to at least primary animal health services, transaction costs needed to be reduced. As a result of this opportunity, policy is expected to be changed to allow CAHWs to perform a wider range of veterinary interventions than was formerly the case. Another important tool that can be used at this stage of a planning process to gain a better understanding of the system is the use of a 'strengths, weaknesses, opportunities and threats' (SWOTs) analysis. Catley *et al.* provide detailed information on participatory approaches towards understanding livestock production systems and the needs of livestock keepers (4).

Vision

Once an overall understanding of the problems existing within the animal health service delivery system is achieved and the opportunities for improving the access of livestock keepers to animal health services are identified, the second stage of the planning process may commence. This involves developing a vision of the situation at the end of the process. Vision enables 'light at the end of the tunnel' to be seen and permits policy-makers to proceed with the following stages of the planning cycle with less apprehension than before the process started.

Project cycle management

A vision of changes required for the future will help planners identify the overall objective or development goal. The strategic planning cycle thus starts to resemble project cycle management and the remaining steps can be managed using the logical framework matrix as a planning tool. A good facilitator will focus the attention of the stakeholders involved on the key issues so that the most important priorities are addressed whilst those of secondary importance are excluded. In this way, all necessary and sufficient objectives are included and most importantly, the structure of the management system will be designed to address the specific needs of the programme.

The role of stakeholder associations and institutions

Stakeholder associations

The importance of stakeholder participation in managing a process of change should not be underestimated. However, stakeholder representation becomes expensive if every individual is to be given the opportunity to voice his opinion. Group or association formation addresses this problem. Such structures are commonly formed in all of human society. In associations representing the interests of stakeholders in developing countries, one of the most challenging issues seems to be the promotion of collective interest over that of self-interest. The weakness inherent in many veterinary associations in developing countries is an apparent apathy on the part of many members or potential members who are either unable largely for financial reasons, or unwilling for selfish reasons, to take part in the affairs of their association. If a collective interest in solving issues concerning a group of stakeholders outweighs self-interest, such associations will become an important and useful means of optimising the use of resources. In Senegal, for instance, the number of farmer associations grew from only 100 in 1987 to 1,500 in 1993. Principally formed to improve marketing opportunities, they also served to provide producer representation to negotiate relationships with government and private organisations. In contrast, in Zambia in 2001, the paid up membership of the Zambia Veterinary Association was only 50 out of a possible 150 veterinarians in government, education, private practice or industry (4). In Senegal, the *Ordre des Docteurs Vétérinaires* (Order of Veterinary Doctors) was created primarily as a self-regulatory organisation as well as being an institution representing the interests of the veterinary profession. As yet, the Order has performed poorly by failing, so far, to address the many roles for which it was created. In 1995, two years after being established, only 35% of DVMS (Doctor of Veterinary Medicine) had registered, only 46% had read any publications and most had only managed to attend fewer than three meetings. However, progressively, as organisation improves and the roles of the institution become clearer, the Order is expected to eventually acquire a position which will instil a sense of professionalism which is lacking today. In the current market, to differentiate themselves from para-professionals, veterinarians will need to make livestock keepers aware of their value as service providers through the promotion of specialised skills (21). The collective interest of private veterinarians seeking equity of access to the market for the provision of animal health services is expected to eventually provide a reason for being for veterinary associations. The attention that is increasingly focusing on the privatisation of veterinary services also means that regulatory bodies such as veterinary boards or councils need to closely examine their roles in relation to setting standards, regulation and disciplinary action with regard to veterinary para-professionals (5).

The experience of Kenya over the past decade is worthy of note. In this country, NGOs and donors failed to engage important

stakeholders in the process of developing institutional relationships with respect to the role of para-professionals in the delivery of animal health services in remote areas (75% of the livestock population and 30% of the human population of Kenya can be found in the ASAL). As a result, the veterinary hierarchy adopted a protective stance towards the monopoly enjoyed. In particular, the KVB issued a press release in January 1998 which prohibited any NGOs, individuals or other organisations from engaging in promoting the illegal practice of veterinary services as defined in the Veterinary Surgeon's Act by para-professionals. This statement was actually a turning point in the history of the evolution of private veterinary practice in Kenya, initiating the process of stakeholder engagement that had been ignored. In May 1999, the NGO which had played a dominant role in establishing community-based animal health programmes in Kenya, the Intermediate Technology Development Group, hosted a milestone workshop which engaged all major stakeholders. Thus, began the process of stakeholder participation in shaping the institutions and organisational relationships. By 2000, the KVB had drafted a training curriculum and guidelines for the establishment of CAHWs and had engaged legal advice on how to revise legislation to accommodate para-professionals. The review and amendment of legislation in Kenya is now at an advanced stage. A proposal has been made that the 3,500 animal health technicians operating in Kenya today be legally recognised and allowed to practice a defined range of interventions under professional supervision. This acknowledges the reality of what is already taking place informally (24).

The Kenya Veterinary Association (KVA) has made significant progress in promoting the interests of an active membership through engagement in dialogue with government, donors, NGOs, the faculty of veterinary medicine, the KVB and the Kenya Association of Veterinary Technicians and Livestock Keepers. As a result of this dialogue, important changes are taking place within each of these institutions which are beginning to ease the effects of transaction costs and allow livestock keepers access to affordable, yet well-regulated animal health services (24). The success of the KVA may be attributed to some extent to the willingness of donors and NGOs to invest in facilitation of the process of this dialogue.

As Friedson stated (9), professional privilege is explained and justified on the basis of three tenets:

- technical skills defined as technical knowledge acquired in formal training
- a set of professional norms guiding ethical behaviour and producing conscientious work without supervision
- trust in proper self-regulatory actions by the profession.

As stressed by Ly (21), the aim of the profession should not be to legalise monopoly, but to promote equity of access to

markets at the same time as satisfying the needs of livestock keepers and those of society for safe animal products.

Quality assurance of veterinary services through the formulation of appropriate supervisory and regulatory mechanisms

According to current law, in most developing countries, the practice of veterinary medicine is restricted to registered veterinarians. The corollary to this is that in those countries where such legislation exists, many activities of para-professionals including CAHWs are illegal. The evidence presented in this paper and the wealth of literature demonstrating the impact of para-professional and community-based animal health service providers would suggest that the debate as to whether or not para-professionals may be permitted to perform certain acts of veterinary medicine is over. Indeed, over the past two years the OIE has repeatedly acknowledged the role of para-professionals on the understanding that governments which choose to sanction their existence do so within an appropriate regulatory framework to ensure the quality of veterinary services. Most recently, the OIE has demonstrated this position through the appointment of an *Ad hoc* Working Group mandated to review and make recommendations for amending the *Terrestrial Animal Health Code* to accommodate para-professional activity with regard to quality of veterinary services and food safety. In a preliminary draft report, the Working Group proposes a number of important changes, including a definition of a 'veterinary para-professional' as a person to whom responsibility for the performance of a veterinary intervention has been delegated by a registered veterinarian.

The responsibility for regulating the veterinary profession is usually conferred upon a statutory body, which, under the British system, is normally named the Veterinary Board or Veterinary Council and under the French system, the *Ordre des Docteurs* (or *Médecins*) *Vétérinaires* (Order of Veterinary Doctors). The underlying principle of this system is that responsibility for the privilege of self-regulation is conferred upon the profession.

The responsibilities of such bodies include the following:

- defining the educational requirements for registration
- establishing procedures for registration
- maintaining registers
- collecting registration and retention fees

- setting standards of practice through a ‘code of ethics’
- setting standards for veterinary premises
- advising the minister on the formulation of rules and regulations governing the practice of veterinary medicine
- establishing disciplinary procedures for taking action against registered veterinarians in cases of professional negligence or serious misconduct.

Many countries are now attempting to address the problem of how to accommodate the practice of a defined range of interventions by para-professionals. One of the best examples of recently revised legislation is the South African (and Namibian) Veterinary and Para-Veterinary Professions Act 19 of 1982 (VPVPA). Although primarily designed to make provisions for veterinary nurses and laboratory technicians, the Act provides a very useful model which other governments may wish to use to make provision for veterinary para-professionals in their own countries (2). Like many laws based on the British legal system, the VPVPA is divided into two distinct components – ‘principal legislation’ and ‘subsidiary legislation’. The principal legislation is embodied in the Act, enacted through Parliamentary decree after a lengthy process of consultation at cabinet and inter-ministerial levels, whilst the subsidiary legislation is embodied in ‘Notices’, announced through authority conferred upon a minister (of agriculture, in the case of South Africa) and published periodically in the *South African Gazette*, the statutory instrument for publishing any changes in law.

The rationale behind this structure is that the principal legislation, in the case of the VPVPA, is used as a means of conferring authority upon the minister (responsible for animal health and related interests) and a body of appointed and elected members, the Veterinary Council, to make rules and regulations governing the practice of veterinary and para-veterinary professions. The provisions made are deliberately general, leaving the detail to be defined in the rules and regulations. This form is used in order to obviate the need for revision of the Act any more frequently than is absolutely necessary as the amendment, revision or repeal of an Act of Parliament is costly, especially in time.

The Act defines the terminology used and the powers or authority conferred on the minister and the statutory body, the Veterinary Council, set up to advise the minister and regulate the activities of veterinarians and para-veterinary professionals. The Act also defines the composition of the Council as well as the responsibilities and operation thereof. The details of the rules and regulations actually made by the minister, on the advice of the Council, are published in Notices in the *Gazette*. In this way, any changes in rules and regulations that may become necessary can be made on an *ad hoc* basis by the minister and become law under a streamlined parliamentary procedure. Should the intervention of CAHWs be regarded as

a temporary stop-gap measure, this structure provides sufficient flexibility to allow the recognition of these workers to be removed from the law, as and when they are deemed to no longer serve a useful purpose, without having to apply the costly procedures of amendment, repeal or revision.

A good example of how this flexibility can be used is the authority that the Act confers upon the minister to adjust the fees that must be paid by veterinarians and para-veterinary professionals for admission to, and annual retention on, their respective registers.

In Tanzania, a legal framework working group (LFWG), set up within the former Ministry of Agriculture and Co-operatives, recommended that the word ‘supervision’ be defined to ensure that a supervising veterinarian would take the responsibility seriously, that supervised para-professionals would not abuse the privilege conferred upon them through being registered and to regulate the quality, supply and use of prescription only and other medicines used for treating sick animals or sold to livestock keepers. The LFWG was guided by the experiences of the AHSP and a number of NGOs involved with testing models for the delivery of animal health services by para-professionals under professional supervision. The main roles of the supervisor, amongst others, were determined as follows:

- to ensure that para-professionals maintained adequate standards of practice
- to ensure that para-professionals used high quality prescription only medicines appropriately
- to act as a source of referral advice in the event of an unusual disease occurrences
- to improve the quality and range of their professional skills over time
- to ensure that para-professionals maintained accurate records of their activities.

Experience showed that there was a tendency for the frequency of contact between supervisors and para-professionals to diminish over a period of time. Regulating a legally-defined rate of contact was recognised as cumbersome, so an agreement was reached to define rate of contact by an incentive to improve the quality of the services, which in turn might increase the income of the supervisor. The provision restricting the use of medicines used by para-professionals to those supplied by the supervisor would provide a reward for taking the risk of accepting responsibility for the outcome of interventions carried out by the supervised para-professionals. Supervision was thus defined as follows: “‘supervision’, for the purposes of this Act shall be deemed to entail a contractual agreement between a registered veterinary surgeon, referred to as the ‘supervisor’ and

a registered para-veterinary professional, hereinafter referred to as the 'supervised para-veterinary professional', whereby:

a) veterinary professional acts as determined in a Notice made under Section 22 (2) may be delegated by the supervisor to be performed by the supervised para-veterinary professional

b) the supervisor accepts full responsibility for the outcome of the performance of such veterinary professional acts as defined under the said Notice in (a) above

c) the supervisor undertakes to maintain a sufficient frequency of contact between himself and the supervised para-veterinary professional to ensure that:

- adequate quality of standards of practice are maintained
- that records of all such veterinary professional acts are properly maintained as prescribed in a Notice under Section (22)

d) the supervised para-veterinary professional undertakes to:

- only practise those veterinary professional acts prescribed in the said Notice referred to in (i) and to refer any other veterinary professional acts to his/her supervisor
- maintain records of his practice as prescribed in the Notice referred to in Section (22)
- to report a summary of such records to his/her supervisor at not less than monthly intervals".

This definition confers responsibility for the outcome of any intervention carried out by a supervised para-professional upon the supervising veterinarian in exchange for a monopoly on the supply of all medicines which are used by the supervised para-professional. In this way, an incentive is provided to guarantee the frequency of contact between supervisor and supervised para-professional. The supervising veterinarian is rewarded for the risk taken by a margin on the sales of veterinary inputs

made during treatment of sick animals by the network of para-professionals operating under his supervision. At the same time, the quality of input supplies is guaranteed and the quality of services provided by the team of supervised para-professionals is likely to improve as the frequency of contact increases.

Many options are available for governments to incorporate para-veterinary professionals within a legal framework, as described by Cooper (5). The mechanisms adopted to regulate veterinarians through registration under a statutory body probably offer the best opportunity to regulate para-professionals. This mechanism not only integrates the responsibility for regulation of all actors in the delivery of veterinary services, but also ensures compliance with ethical standards at all levels and instils a sense of professionalism.

In conclusion, to be effective and enforceable, legislation must not be excessively prohibitive. At the same time, in the absence of sufficient regulation of the practice of veterinary medicine and the supply and use of veterinary medicines, preventing malpractice and drug misuse by otherwise unlicensed practitioners is more difficult.

The overall aims of veterinary legislation are to establish the veterinary profession as a self-regulating institution, to protect the rights of the public from unlicensed practitioners, to regulate the provision of veterinary services and to ensure the welfare of animals under veterinary care.

In the context of food safety and international trade in livestock and animal products, sufficient regulation and supervision of para-professionals as members of the national veterinary services offers an opportunity to assure the quality of veterinary services as prescribed by the OIE (26).

Faciliter la privatisation des services de santé animale dans les pays en développement par l'établissement de relations organisationnelles et institutionnelles et la mise en place de synergies entre les vétérinaires et les paraprofessionnels dans les secteurs public et privé

J.D. Woodford

Résumé

Dans la plupart des pays en développement, la prestation de services vétérinaires était encore perçue récemment comme une mission incombant à l'administration publique. Cependant, depuis une quarantaine d'années, les contraintes économiques et les programmes d'ajustement structurel ont conduit progressivement à une réduction des investissements publics en termes réels et,

par conséquent, à une baisse qualitative et quantitative des services proposés aux éleveurs. Après avoir reconnu qu'ils n'étaient plus en mesure d'assurer des services de nature essentiellement « privée », de nombreux gouvernements ont radicalement changé de cap politique et introduit les concepts de l'économie de marché, notamment dans le domaine de la production agricole et de l'élevage. Le rôle du gouvernement consistera désormais à fournir un nombre limité de services essentiels relevant du « bien public » et à créer un environnement favorable au secteur privé, dans lequel ce dernier pourra intervenir comme prestataire de services « à caractère privé » et, dans le même temps, exercer certaines fonctions publiques ou obtenir un mandat sanitaire comme partenaire contractuel.

Toutefois, la quasi-totalité des pays en développement n'ont pas accompagné ces revirements politiques de stratégies adéquates de développement. Cette situation s'explique par des raisons complexes. Les programmes d'ajustement structurel ont peut-être été perçus comme des mesures imposées aux États par les bailleurs de fonds. Ils ont été ressentis par de nombreux responsables politiques comme la cause de leurs déboires financiers et non comme un remède. Ensuite, les hauts fonctionnaires chargés de la santé animale ont généralement reçu une formation de vétérinaire et ne possèdent pas les qualités de gestionnaire requises pour organiser efficacement les changements. En outre, dans le contexte de la prestation des services vétérinaires cliniques, notamment dans les zones rurales et éloignées, les fonds alloués par les bailleurs de fonds visent à promouvoir la déréglementation et l'établissement d'agents paraprofessionnels privés ; or, cette solution, qui est souvent perçue comme une menace par l'ensemble du corps vétérinaire, pourrait limiter l'accès des marchés internationaux aux échanges commerciaux d'animaux et de produits d'origine animale. En l'absence d'une stratégie clairement définie de privatisation des services de santé animale, un système informel de prestation de services a vu le jour dans de nombreux pays en développement. À présent, la plupart des gouvernements reconnaîtront sans doute que cette tendance présente un risque beaucoup plus grave que l'établissement réglementé d'agents paraprofessionnels soumis à un contrôle efficace.

Dans cet article, l'auteur examine quelques défis importants que les responsables politiques devront relever pour réussir la transition d'une prestation exclusivement publique de services de santé animale vers la création d'un partenariat avec le secteur privé. Il incombe aux États et aux bailleurs de fonds d'adopter des mesures concrètes pour faciliter la privatisation des services de santé animale et notamment ceux destinés aux systèmes d'élevage de subsistance et d'élevage pastoral dans les zones rurales les plus défavorisées. Les premiers investissements concerneront le développement des compétences en gestion requises à tous les échelons du système de prestation. Des investissements supplémentaires seront vraisemblablement nécessaires pour assurer la gestion des changements à l'aide d'outils divers, par exemple le cycle de planification stratégique.

Lorsque les ressources suffisantes auront été réunies, permettant d'intégrer tous les acteurs concernés par la prestation des services de santé animale, il conviendra de définir quelles sont les institutions appropriées et les relations organisationnelles les plus efficaces pour résoudre les problèmes prioritaires. L'auteur aborde ensuite l'étude des liens existant entre les systèmes d'élevage et la demande de services de santé animale. Pour être économiquement viable, l'offre de ces services doit répondre à la demande réelle plutôt qu'à une demande perçue. La conception d'un modèle adéquat de prestation de services de santé animale passe donc par une analyse approfondie du système d'élevage ciblé. Les gouvernements et les bailleurs de fonds pourraient apporter une contribution positive en finançant de telles analyses, des études de marché, des plans d'entreprise et des formations, et en facilitant l'accès à des prêts à taux réduit.

Enfin, sur le plan réglementaire, un grand nombre des activités effectuées par les agents paraprofessionnels sont considérées, dans l'état actuel de la législation, comme des actes de médecine ou de chirurgie vétérinaire qui ne peuvent être légalement posés que par des vétérinaires qualifiés et agréés. La notion de législation « principale » et « subsidiaire » prévoit la souplesse réglementaire nécessaire en matière de prestation des services de santé animale pour s'adapter à l'évolution rapide du secteur.

La déréglementation implique que la responsabilité inhérente à la réalisation d'interventions vétérinaires définies soit déléguée à du personnel paraprofessionnel travaillant sous la « supervision » ou la « direction » d'un vétérinaire agréé. L'auteur explique comment l'expérience acquise dans le cadre de plusieurs projets en Tanzanie a permis de proposer une définition juridique de la « supervision ». Cette définition permet de dissiper les craintes suscitées par une éventuelle remise en question des normes de prestation des services de santé animale suite à l'établissement du personnel paraprofessionnel. Outre le fait qu'il procure de nouvelles perspectives d'emploi aux vétérinaires privés dans les zones rurales, lesquelles se verraient autrement refuser l'accès aux services primaires et officiels de santé animale, cet arrangement pourrait également contribuer à la mise en place d'un mécanisme d'assurance qualité dans les services vétérinaires nationaux des pays en développement.

Mots-clés

Législation – Pays en développement – Service vétérinaire – Système de prestation.



Sinergia entre veterinarios y paraprofesionales en los sectores público y privado: relaciones organizativas e institucionales para facilitar el proceso de privatización de servicios de sanidad animal en los países en desarrollo

J.D. Woodford

Resumen

Hasta hace poco tiempo, en la mayoría de los países en desarrollo se consideraba que la prestación de servicios veterinarios era responsabilidad del sector público. En las últimas cuatro décadas, sin embargo, las dificultades económicas y la imposición de programas de ajuste estructural han provocado un decenso progresivo de la inversión pública en términos reales y por consiguiente una reducción, en calidad y cantidad, de los servicios que se ofrecían a los ganaderos. Muchos gobiernos, comprendiendo que ya no estaban en condiciones de prestar servicios que eran básicamente 'de interés privado', modificaron profundamente su política con la idea de introducir conceptos propios de una economía de mercado, en particular en los terrenos de la agricultura y la producción ganadera. En el futuro, el papel del gobierno consistiría en prestar unos pocos servicios básicos 'de interés general' y crear las condiciones propicias para que el sector privado pudiera instalarse como prestador de servicios 'de interés privado' y colaborar al mismo tiempo en la realización de determinadas labores propias del sector público, con arreglo a fórmulas tales como los contratos o las acreditaciones zoonosanitarias.

No obstante, en casi ningún país en desarrollo esa inflexión política se acompañó de estrategias de desarrollo apropiadas, por razones múltiples y complejas. En primer lugar, cabe considerar que los donantes "endilgaron" los programas de ajuste estructural a los gobiernos, de forma que muchos responsables políticos tienden a ver en ellos la causa, y no la solución, de los problemas financieros. En segundo lugar, la mayoría de los dirigentes de los organismos públicos del ramo son veterinarios de formación y carecen de la capacidad de gestión necesaria para planificar e introducir cambios eficazmente. Además, por lo que respecta a la prestación de servicios clínicos, especialmente en zonas rurales o aisladas, la solución preconizada por los proveedores de fondos intercionales, que conlleva la liberalización y la implantación de paraprofesionales que trabajen a título privado, suele percibirse como una amenaza para la profesión veterinaria, y podría obstaculizar el acceso a los mercados internacionales del ganado y sus derivados. A falta de una estrategia bien planificada para privatizar los servicios zoonosanitarios, en muchos países en desarrollo ha ido ganando terreno un sistema informal de prestación de servicios. Muchos gobiernos admitirían hoy en día que ello presenta mayores riesgos que la implantación reglamentada y debidamente supervisada de paraprofesionales.

El autor examina algunas de las principales dificultades a que se enfrentan los planificadores en sus esfuerzos por encauzar una transición que transforme la prestación completa de servicios zoonosanitarios por parte del sector público en un sistema de colaboración con el sector privado. Los gobiernos y proveedores de fondos deben tomar medidas activas para facilitar el proceso de privatización de los servicios zoonosanitarios, en especial los destinados a las economías de subsistencia y pastoreo de las zonas rurales más pobres. Ello exigiría inversiones iniciales para crear la necesaria capacidad de gestión en todos los eslabones del sistema de prestación de servicios. Posteriormente harían falta más inversiones para que los cambios pudieran asimilarse utilizando herramientas de gestión tales como el ciclo de planificación estratégica.

En caso de que hubiera recursos suficientes para que todas las partes interesadas se implicaran en la prestación de servicios de sanidad animal, sería posible determinar las instituciones apropiadas y las relaciones organizativas más eficaces para ocuparse de todos los temas importantes.

A continuación, el autor describe el mecanismo por el que los sistemas de producción ganadera determinan el nivel de demanda de servicios zoonosanitarios. Estos sólo serán económicamente viables en la medida en que estén pensados para satisfacer la demanda real, y no la supuesta. Por ello, a la hora de definir un modelo adecuado de prestación de servicios de sanidad animal es preciso analizar cuidadosamente el sistema de producción al que van a dirigirse esos servicios. Los gobiernos y proveedores de fondos pueden ser útiles a este respecto, facilitando los recursos necesarios para realizar este tipo de análisis, así como estudios de mercado, planes de empresa y actividades de formación, y también para facilitar el acceso a créditos blandos.

Por lo que respecta a la liberalización, por último, muchas de las actividades que en la actualidad llevan a cabo paraprofesionales constituyen, según la legislación vigente, actos de medicina o cirugía veterinaria, por lo que legalmente deberían ser competencia exclusiva de veterinarios titulados y registrados. A la hora de reglamentar la prestación de servicios zoonosanitarios, el concepto de legislación 'principal' y 'subsidiaria' ofrece la flexibilidad necesaria para dar acomodo a los rápidos cambios que hoy en día se están produciendo en ese terreno.

La liberalización presupone que se delegue en paraprofesionales la responsabilidad de una serie de intervenciones, realizadas bajo la 'supervisión' o 'dirección' de un veterinario registrado. El autor describe la forma en que la experiencia de unos cuantos proyectos aplicados en Tanzania sirvió para proponer una definición de 'supervisión' a efectos legislativos. Gracias a esa

definición, puede superarse el temor de que la implantación de paraprofesionales se traduzca en un descenso del nivel de calidad en la prestación de servicios zoonosanitarios. Este modo de funcionamiento, además, crea puestos de trabajo para veterinarios privados en zonas rurales que de otra forma se verían privadas de servicios oficiales de atención zoonosanitaria primaria, y puede contribuir al proceso de garantizar la calidad de los servicios veterinarios nacionales de los países en desarrollo.

Palabras clave

Legislación – País en desarrollo – Servicio veterinario – Sistema de prestación de servicios.



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