

# Privatisation of veterinary services in Jamaica: a case study

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## Summary

Clinical veterinary services were privatised in Jamaica in September 1992. Using the limited official data, the authors briefly examine the premise and logistics behind transferring the responsibility for clinical services, which may be regarded as 'a private good', to private veterinary practitioners. There are indications that this privatisation model can work for farmers, despite financial problems in the livestock industry and a decline in production, caused by trade liberalisation policies and the substitution of cheaper imports. In addition, other national fiscal problems, such as a downturn in the economy, have left veterinarians attempting to boost production in a livestock industry which lacks adequate financial structuring and resources.

The authors express concern that various unpublished projections since the last official agricultural survey in 1996 indicate that the livestock industry in Jamaica is diminishing. It is possible that valuable genetic breeding stock may never recover. A comprehensive study of the future of the livestock industry and its associated services is strongly urged.

Ten years after the event, the authors reflect on the privatisation of clinical veterinary services in Jamaica and offer some suggestions to improve on the quality of the services offered by private veterinary practitioners.

## Keywords

Animal health services delivery – Caribbean – Clinical service – Jamaica – Privatisation – Veterinary Service.

## Introduction

### Overview

Jamaica is the largest English-speaking island in the Caribbean Sea, 145 km south of Cuba. It has a total area of 10,991 km<sup>2</sup>, with 160 km<sup>2</sup> of water, a coastline of 1,022 km and no land boundaries (3).

### Agricultural land for livestock development

The most important sources of income for the island are tourism and bauxite. However, there are more people involved in agricultural activities than working in these sectors, and the economy remains primarily agricultural. The 1996 Census of Agriculture (11) identified 449,493 hectares (ha) in use as

agricultural land, a reduction of approximately 25% since the last survey in 1968. Of this arable land, 61% can be regarded as 'active farmland', with no significant change in use since the 1968 survey. A total of 47.9% of all the agricultural land is found in four of the fourteen parishes (districts):

- 14% in Clarendon
- 11.2% in St Elizabeth
- 12.2% in St Ann
- 10.5% in St Catherine.

The primary crops are sugarcane, bananas, citrus fruit and coconuts, raised on large plantations where cattle are also reared, as well as on mined bauxite land which has been

restored. However, there are also many subsistence farmers occupying smallholdings. The average size of a smallholding where livestock rearing was a primary function was 3.12 ha in 1968, 2.90 ha in 1978 and 2.17 ha in the 1996 survey. It is interesting to note that between 1990 and 1996 there has been an increase in various categories of livestock except beef. However, discussions with farmers and livestock organisations have produced unsubstantiated claims that there are, in fact, fewer livestock than the 1996 survey indicated. There were problems in obtaining meaningful data because many agricultural institutions did not have current data available.

### The livestock industry

Although the livestock sector has failed to show significant and sustained growth over the last three decades, there are well-developed fishing, poultry and livestock industries. The livestock industry as a whole has been affected by trade liberalisation policies, cheaper import substitutions, and the 'dumping' of subsidised commodities from other countries on to the local market, leading to serious declines in local production. The government Veterinary Services Division (VSD) has played a significant role in the development of the livestock industry and in maintaining a relatively disease-free environment.

### The dairy industry

Fresh milk production for local consumption has rarely exceeded 15% of local demand over the years. A significant proportion is processed into condensed milk because of the demand for a milk product that does not require refrigeration. The dairy industry has had the most serious setback of the livestock sector. Cheaper imported milk powder has affected 'farm gate' prices, causing many dairy farms to go out of production. In 1992, 38.8 million litres of milk were produced. In 2002, this dropped to 20.4 million litres, a decrease to only 53% of pre-privatisation production. Despite projections of recovery (7) and an increase in taxes and cess on imports, neither bank financing nor income tax relief to *bona fide* farmers has succeeded in promoting new dairy farming investment. There is concern as to whether there will be sufficient milking animals and heifers to meet projected targets. Nevertheless, the dairy sector remains a potentially profitable industry.

### The small ruminant industry

Chevron or goat meat is a national delicacy and, although cheaper culled ewe and wether meat is imported from Australia and New Zealand, the demand for goat meat remains high. Boer goats have been imported to upgrade the quality of the local goats, which had been partly improved by previous importations of Anglo-Nubian, Saanan and Toggenberg breeding stock. Most local goats are reared extensively on marginal land, supplemented with concentrate feed, hay and straw. The sheep industry has never had significant growth, though the hairy Barbados blackbelly sheep can be found on

many smallholdings. Intensive goat production is practised but goats largely remain the product of smallholder farmers and owners, and thus production is limited by the foraging nature of the animals, as well as parasite problems.

### The swine industry

In Jamaica, as elsewhere, this industry has had its surpluses and scarcities, and has also been affected by cheaper imports. However, plans are currently in progress to start a sizeable pig-farming unit, primarily to provide high-quality fresh pork and ham to the tourist hotel trade. The project will supply multiplier swine to medium and small pig farmers. The highly spiced 'jerk seasoning' associated with barbecued pork preparation is very popular locally and is also exported. Pork production for 2002 was 5.4 million kg, a decline from 6.3 million kg in 2001 (8).

### The poultry industry

The poultry industry has become highly competitive. However, despite cost reduction, heavy investment in capital expenditure and improvements in efficiency, it is still unable to meet local demand. In 1983, 30.5 million kg of broiler meat were produced. In 2001 this figure rose to 38 million kg, while, in 2002, the industry produced over 100 million kg of broiler meat (Table I).

**Table I**  
**A comparison of the net sales and profits of poultry producers in Jamaica in the years 1993 and 2003**

Year	Net sales		Net profit	
1993 <sup>a)</sup>	J\$1.984 billion	US\$77.3 million	J\$46.0 billion	US\$1,792 million
2003 <sup>b)</sup>	J\$6.871 billion	US\$118.6 million	J\$342.6 billion	US\$5,915 million

a) exchange rate, annual mean for 1993: US\$1 = J\$25.68

b) exchange rate, annual mean for 2003: US\$1 = J\$57.92

Data not adjusted for inflation

Source: (6)

A major local poultry producer has diversified from the production of broiler chickens into layer chicks and egg sales. This producer has also ventured into feedlot beef, aquaculture and an animal feed manufacturing facility (6).

### Aquaculture

Diversification into *Tilapia* fish species and freshwater shrimp aquaculture has been highly successful and a significant part of Jamaican production is processed for export. The marine queen conch (*Strombus gigas*) is in demand overseas and an industry has developed around its potential for export. The VSD provides residue testing for pollutants and frequently inspects packing facilities, in conformation with the requirements of importing countries.

# Privatising the delivery of animal health services in Jamaica

## History of veterinary service delivery in Jamaica

Although little published information is readily available about the early era of Jamaican history, no presence of livestock was recorded by the explorer Christopher Columbus when he landed in 1494. The Taino Indian islanders and later Spanish settlers reared pigs and horses. The earliest record of official veterinary involvement dates back to the mid-1950s, when a single United Kingdom (UK) expatriate veterinary officer (VO) was attached to the Department of Agriculture. By the time Jamaica gained independence in 1962 there was a Veterinary Department in place. This Department later became the VSD, with a full complement of VOs, animal health assistants (AHAs), administrators and clerical staff. The contribution of these early veterinarians was remarkable, despite minimal access to laboratories, and it is in part due to their efforts that the island of Jamaica is now free from many major notifiable diseases. Many tropical diseases were reported and treated with the medications available at the time. Primary veterinary support was provided to the government-owned livestock stations, which were developing beef and dairy breeds and small ruminant and swine stock. The Veterinary Department was also exploring genetic improvements to breeding stock, using artificial insemination, and conducting nutrition testing and pasture improvement trials.

## The pre-privatisation period

Jamaica inherited a British-oriented colonial Veterinary Service, similar to those which existed in many former British colonies. In Africa, the colonial emphasis was on monitoring and surveillance of the local livestock population for the threat of exotic diseases, maintained in wildlife reservoirs. However, on an island country, with limited wildlife, the 'public agenda' was different. The revised emphasis was to provide a clinical service to the national herds and veterinary involvement in production. In Jamaica, surveillance was relatively easy to conduct and any problems were usually associated with the importation of livestock. Legislative support was directed towards restricting imports of livestock, meat and meat by-products from other countries, except 'scheduled' countries, such as Canada, Australia and New Zealand, which had excellent Veterinary Services and were relatively disease-free. The UK was also free of rabies, a status maintained by a rigid six-month quarantine of imported companion animals. Jamaica also adopted rigorous regulations which exist to this day.

Over 90% of the local veterinarians were employed in the civil service, with the usual civil service restrictions on extra-

curricular employment. However, as a result of the scarcity of private practitioners, some special privileges were granted. Veterinarians, along with government-employed physicians working in hospitals, were allowed to have part-time practices. These veterinary practitioners were restricted to treating companion animals, racing horses and horses for riding and polo, after official working hours. This concession also supplemented incomes, in an attempt to prevent VOs who were disgruntled with their remuneration and conditions of service from emigrating. A few did leave, however, and others never returned after their professional studies overseas.

## Deployment of the professional staff of the Veterinary Services Division

The VSD had grown to become a fully fledged division within the Ministry of Agriculture (MoA), with an investigation laboratory, a quarantine section, a field section and a Directorate that was responsible to the Permanent Secretary of the MoA. Field veterinarians were assigned to the parishes as parish veterinary officers (PVOs), with a team of two or three trained AHAs. Artificial insemination (AI) officers became part of the Division, but the AI Service was later separated. More recently, it has become re-incorporated into the VSD, with its complement of nine AI officers. A Loan Bull Scheme is also maintained for small to medium-sized beef farms, where farmers can borrow a government owned bull, which is regularly tested. The meat inspection service, with responsibility for abattoirs, is managed by the Veterinary Public Health Unit, which became part of the Ministry of Health. The Veterinary Public Health Unit is also responsible for brucellosis surveillance and following-up positive leptospirosis tests performed at the Veterinary Diagnostic Laboratory on suspected human and animal cases of the disease.

In the pre-privatisation era of animal health delivery, farms received these services with little effort made to collect payment for them. This was a serious failing, resulting in a service which was, in effect, subsidised by default. Any fees that were collected became part of the general consolidated fund, with no immediate benefit to the VSD. It became obvious that this clinical service was not even covering its costs. The other statutory services for surveillance and monitoring, such as brucellosis and tuberculosis testing of dairy and beef herds, were funded by the Pan American Health Organization (PAHO). Tests for compliance with Public Health Regulations were, and continue to be, free for farmers, and the veterinarians who conduct them receive sessional pay from the government; if a test does not relate to public health regulations then the farmer pays the private veterinarian directly. No charges were levied for field investigations. The VSD successfully contained an outbreak of eastern equine encephalomyelitis in St Thomas with the aid of PAHO. This led to a successful project for the eradication of bovine tuberculosis and brucellosis. An outbreak of Aujeszky's disease (pseudo-rabies), in semi-feral pigs reared on city rubbish dumps, was also successfully contained after

testing, slaughter of the affected animals and compensation. A serious outbreak of equine influenza affected the racing calendar, causing unemployment and a significant drop in tax proceeds from the industry, as race meetings were cancelled for several weeks. Compulsory vaccination has since been established for horses participating in race meetings; owners and trainers pay for this service. A nominal charge was levied for a vaccination campaign against blackleg (*Clostridium chauvoei*), aimed at stockholders with a few head of cattle. On-site vaccinations against swine erysipelas on small and medium-sized pig farms were partially funded in the same way.

### Addressing professional staff frustrations

Internal dissatisfaction with remuneration and inadequate equipment and supplies caused frustration among professional veterinarians. There was reluctance to move to rural areas, because of the reduced opportunity for private companion animal practice. The mid-1980s saw an attempt to address these issues by providing PVOs with the incentives of new office and clinic facilities and a residential cottage in each parish. These facilities were provided with the assistance of the European Union (EU) on land supplied by the government. This initiative, known as the Delivery of Veterinary Services Project, offered an opportunity for PVOs to live in the parishes at subsidised rentals. Today, these office/clinics and residential cottages are still being occupied by Livestock Veterinary Inspectors (LVIs) at negligible or 'peppercorn' rentals, as part of their part-time or 'sessional' remuneration (i.e. fixed pay scale per hour for a certain number of sessions per month).

Other friendly governments contributed equipment and revolving funds to purchase drugs. This alleviated the discontent, to some extent, but frustrations and apathy soon returned as the cost of living spiralled upwards. The government seemed perennially unable to allocate adequate resources to the administration of Veterinary Services in the 1980s. As a result, the Jamaica Veterinary Medical Association (JVMA) issued a call for more resources (2). However, budgetary deficits continued to escalate, affecting recurring cost allocations, such as wages, as other public and private institutions also faced financial insecurity.

### Recommendations for privatisation

Many developing countries are confronted with rising budgetary fiscal deficits, leading international investors and donors to insist on structural changes to decrease the deficit. Most countries have had to evaluate their animal health services, among others, in order to ensure their sustainability. The result for many countries has been the concept of 'privatisation', or the separation, of clinical services, which are transferred to private veterinary practitioners. The regulatory services are retained by the State with, presumably, net savings. The savings are intended to come from reductions in recurring expenditure, such as salaries and job perquisites for VOs, wages

for field assistants and other clinic and office expenses. Privatisation was officially announced for Jamaica in 1992.

Turkson and Brownie studied various economic parameters before and after this privatisation period, such as the recurrent VSD budget, staff salaries and other costs. They concluded that privatisation did not resolve the lack of finances within the Veterinary Services. The additional net resources funded previously underfunded projects, with no net increase in savings to the MoA budget. Privatisation neither improved nor stemmed the declines that had been initiated before privatisation. Turkson and Brownie noted that there was no overall difference in allocations between 1992/1993 and 1996/1997, four years after privatisation, although using linear regression analysis there was a statistical difference in certain sub-allocations, such as salaries as a percentage of the budget (14).

The concept of privatisation was also based on the availability of veterinarians in private practice and on the belief that market forces keep costs down for the consumer. Fortunately, due to previous circumstances, Jamaican state veterinarians had already had some experience with private practice for companion animals, so the switch to private practice was not dramatically different (Table II).

**Table II**  
**A comparison of veterinarians in private and public practice in Jamaica from 1987 to 2003**

Veterinary occupations	1987	1992	1996	2003
Number of veterinarians in full-time State service	15	22	7	11
Number of veterinarians in private practice or industry	22	28	53	39
Total number of veterinarians	37	50	60	50
Percentage of private veterinarians among working veterinarians	59.5%	56.9%	88.3%	78%
Percentage of private veterinarians in food animal practice	n/a	n/a	n/a	26% <sup>(a)</sup>

a) some in mixed practices

The year 2003 saw eight new graduates returning home from the University of the West Indies School of Veterinary Medicine, located in Trinidad and Tobago. Several senior veterinarians had opted to retire from practice during the preceding seven-year period. In total, 78% of working veterinarians were in private companion animal practice. These data compare favourably with those for developed countries (9, 10). Fortunately for the veterinary industry, companion animal private practices had been established for some time and clients were accustomed to paying for clinical services, in contrast to those services provided to farmers. As noted above, the clinical

services provided to medium and smallholding farmers were effectively subsidised. Though these farmers were charged for services, the collection of fees was not enforced and farmers could take their time in paying or sometimes never pay at all. As a result, after privatisation, it was difficult to collect immediate payment for the services provided as the farmers were used to the old system of payment. It was therefore relatively easy for those VOs who had been made redundant to 'fall back on' or resort to the companion animal practice component of their work. Nonetheless, the clinical support provided by the PVOs was never a free service; it simply became highly subsidised by default.

One item of revenue regarded as significant in companion animal practice in Jamaica is the manual extraction of larvae of fly-blown wounds, known as 'maggot removal'. Maggots affect livestock, companion animals and even humans. The cause is the New World screwworm fly (*Cochliomyia hominivorax*) whose larvae infest such wounds. This infestation can be eradicated using the 'sterile insect technique', in which sterile male flies are released by aircraft and at ground level. The national New World Screwworm Eradication Project (NWSEP), a joint project of the International Atomic Energy Agency, the United States Department of Agriculture and the Government of Jamaica, was introduced into Jamaica in the year 2000. A potentially very successful programme, it has experienced problems in Jamaica, ranging from difficulties at the factory in Mexico, where male flies are mass produced, to logistical problems in radiation and transportation. The projected three-year programme has now been extended to five years, ending in 2005. (Table III shows the percentage income generated by maggot extractions from infested wounds. Since the introduction of the NWSEP most clinics have reported a significant decrease in revenue from this source of nearly 70%. This situation was welcome, however, as less wound care was necessary, but occasional cases of myiasis still occurred.)

Accurate costings and good business practices, with minimal unpaid or partially paid customer bills, should enable a veterinary practice to succeed, as should a rural mixed animal

**Table III**  
**Revenue gained from removing maggots (*Cochliomyia hominivorax*) from wound infestations, before and after the introduction of the New World Screwworm Eradication Project**

Year	Income expressed as a percentage of annual revenue
1998	2.94%
1999	2.47%
2000 *	1.10%
2001	0.85%
2002	0.86%
2003	0.97%

\* Year in which the eradication project was introduced

practice, catering for a percentage of livestock patients and promoting various resources and partnerships.

The general current perception is that livestock numbers in Jamaica are decreasing. Information from agricultural associations, as well as less publicised data, suggests that livestock numbers have definitely declined since the 1996 Agricultural Survey (11), which showed a slight increase since the previous survey in 1990.

### Financial deficits beyond budgetary control

In the annual Government budget of 1992 to 1993, the year privatisation was adopted, only half the funds requested by the VSD through the MoA were allocated. This was despite the fact that the requested sum was less than the allocation of the previous year, 1991 to 1992, and also despite a devaluation in the local dollar against the US dollar, i.e. a significant change in the exchange rate (2). The previous decade had seen a regular annual increase in the national fiscal deficit, in which expenditures were consistently higher than revenues, and debt-to-revenue ratios increased (i.e. Jamaica spent more than it earned). The high inflation rate and other poor macro-economic indices had a disastrous socio-economic effect as tax revenues were further reduced. This created another problem in that sources of foreign investment were diminishing. International investors needed guarantees from monitoring agencies, such as the International Monetary Fund (IMF) and the World Bank. In their recommendations for economic recovery, the IMF and World Bank proposed major structural re-adjustment programmes, including policies on macro-economic stabilisation, liberalisation of the market-place and privatisation of certain publicly financed sectors of the economy.

During 1983 to 1984, the Food and Agriculture Organization (FAO) of the United Nations sent a veterinary epidemiologist from Louisiana State University School of Veterinary Medicine, Professor Martin Hugh-Jones, to study the situation in Jamaica, advise accordingly in an FAO report (4) and make proposals for change. The FAO study examined various options and recommended the privatisation of services that generated non-recoverable expenditures. In other words, services such as the clinical services of the VSD were recommended for major restructuring. The report recommended the following measures:

- retaining the Directorate and Senior VOs to run the investigation laboratory
- retaining the Quarantine Officer
- replacing the PVOs with part-time LVIs.

These LVIs could be recruited for disease surveillance and occasional regulatory duties and paid sessional pay for their services. Some former PVOs were appointed as LVIs.

## The privatisation debate

Privatisation, as defined by the FAO, is the transfer of activities, functions, responsibilities or property from the public to the private sector. This increases the play of market forces in the economy (5). It is also the transfer of 'public good' services, provided by State veterinarians, to private veterinarians as 'private goods' for private benefit.

In Jamaica, however, this process did not involve any detailed discussion or consultation with veterinarians. Although generalised discussions had been in progress, veterinarians were informed that the new system would be adopted only about two days before it was announced to the public (2). There was no introductory period of rehabilitation or preparation for this new entrepreneurial approach, which would require civil service professionals to adjust to entry into a far more competitive field.

Rather than evolve a system to fit the local circumstances, the privatisation model adopted by the VSD Directorate emulated the model being delivered in the developed countries. In developed countries, veterinary regulatory services, delivered by State veterinarians, are physically divorced from clinical services, which are delivered by private practitioners, but some former State veterinarians were required to act as LVIs on a sessional basis. This model is not suitable for African Veterinary Services, as there is little scope for private practice (9, 13), but it can work in Jamaica because there is always the possibility of working in private companion animal practice, which existed in Jamaica long before the privatisation of the public Veterinary Services.

Although the members of JVMA and those PVOs who were directly involved had been in general discussion with the VSD Directorate for some time, it was not until September 1992 that privatisation was officially adopted (2). Burritt states that not enough time was given to address the concerns of the PVOs or to inform farmers. A 'shock announcement' gave PVOs approximately two days to meet their farmer clients and discuss the preparations for and consequences of privatisation. This was apparently conducted with the belief that a fast and radical break was best to facilitate the transition.

The public and consumers were only given short notice that they would be required to pay for services, and to pay promptly. Very little was done to prepare them for the fact that veterinary fees would rise; small farmers could have been encouraged to form co-operatives and share visit costs, etc., but there was no attempt to discuss such cost-saving options and there was no detailed consultation with farmers. It is interesting to note that a meeting of the chief VOs of African and Asian countries, sponsored by the OIE (World organisation for animal health), gave the opinion that State or regulatory services should not be separated from clinical services (1). If such a system did need to be put into effect, the meeting recommended that

para-professional staff should be incorporated to keep costs down for small-holders and subsistence farmers.

### Rehabilitation in preparation for privatisation

It is strongly felt that some form of preparation for redundancy and rehabilitation should have occurred. It requires some entrepreneurship to adopt a more business-like attitude to practice management and fee collection, skills which are not taught in many European-based professional training curricula. Burritt mentions that some practitioners changed their employment to the agricultural industry to avoid the responsibilities of fee collection (2). The farmer/client, the recipient of the 'private good', must also be prepared for privatisation.

### Perceived undervaluation of veterinary services

Burritt (2) felt that farmers undervalued the range and costs of veterinary services. Farmers can be made aware of the advantages of these services through gatherings such as regional and national agricultural livestock shows and society meetings. The Agricultural Extension Service of the MoA has been severely reduced, and some extension functions have been privatised to the Rural Agricultural Development Authority (RADA), a rural bank providing loans to farmers. The Jamaica Agricultural Society should be used to promote 'public and private good' services.

A theriogenology project of the 1960s, funded by the United States Agency for International Development, helped to educate farmers in the economic benefits of Veterinary Services. Private practitioners may be reluctant to undertake such advisory education outside formal extension services. Farmers on small and medium-sized holdings also perceive that distances from the veterinary office would make service and travelling charges exorbitant. But there are possible solutions to such problems, such as sharing costs (see 'Farmer co-operatives').

## Discussion

The premises used to arrive at the decision to privatise were logical and necessary, as determined and concluded by earlier studies (2, 13). The privatisation of clinical services was an easy target as a 'private good'. It was assumed that these services could be easily absorbed by the private sector in which, it was also assumed, there would be no shortage of providers. However, a regional or national veterinary school significantly increases the numbers of new graduates on the market. The Jamaican experience of privatisation was possibly one of the earliest models put into effect in a developing country. Other countries facing similar large budgetary deficits, particularly in sub-Saharan Africa, also adopted privatisation, but had serious

problems adopting it as fully as Jamaica (13), despite also undertaking substantial structural re-adjustment programmes.

Under privatisation, 'public good' services, such as quarantine or meat inspection, should continue under the authority of the State. This State unit will need fewer staff and should, therefore, require a smaller budget. However, the post-privatisation budgetary allocation was not significantly lower. No itemised financial accounts or 'break-downs' were available, but it is possible that the budgetary allocation was not lower because it included redundancy payments to VOs and AHAs and that higher allocations were made to continuing projects which had previously been under-funded.

Private practices can only prosper with adequate numbers of patients and owners or, in the case of food animals, livestock and owners who are willing and able to pay for the services they gain. The downturn in the economy and cheaper import substitutions have negatively affected the livelihoods of most subsistence farmers and small livestock owners. Though the 1996 data may show increases, compared with those of 1990, later individual livestock data indicate otherwise. There is concern that valuable genetic material produced from years of progeny testing and improvement may be lost, such as the famous Jamaica Hope dairy cattle. Few are currently being registered in the breed pedigree registers (8). The concern is that, when demand is revitalised, requiring increased production, there may be insufficient quality breeding stock to meet projected targets.

The decrease in numbers of professionals and para-professionals in the VSD exposes the animal population to an increased threat of entry of exotic disease. Jamaica has an excellent record of disease exclusion, monitoring and containment. Being an island has its advantages, despite an extensive coastline which is open to smuggling. Among other perceived problems of privatisation is the insufficient density of demand for animal health services in some parishes. Before privatisation, PVOs avoided postings to these districts or sent assistants on cases. In 1996, between 85% and 95% of beef holdings had fewer than five head of cattle (11). Turkson *et al.* noted the distinction between the ability to pay and willingness to pay (15), but the willingness or unwillingness to pay is a cultural problem rather than a human frailty. Moreover, this problem is not always due to a perception by the customer that they have been overcharged. Some consumers genuinely have cash-flow problems and are unable to pay. Turkson surveyed several veterinarians about their ratio of service to medications to mileage (40:40:20) but, after explanation, these ratios were considered understandable and fair. Displaced para-professionals practising medicine are no longer considered a serious threat to the livelihoods of veterinarians as these para-professionals have usually found regular alternative employment. Para-professionals are enrolled annually by the Veterinary Board under the Veterinary Act and are liable to prosecution.

In the near future, there will be enough information to evaluate the efficacy of the privatisation of animal health services in developing countries more clearly. Governments willing to move in this direction should, as Mlangwa and Kisauzi recommend (9), consider the following important issues:

- a) they should take consumer demand into account
- b) they should gather and analyse the available information from self-employed veterinarians
- c) they should prepare a sustainable funding programme to manage the privatisation of animal health services in the tropics.

Another growing concern is the diminishing interest in farmed or 'food' animal medicine in North America and perhaps globally. Dr Rod Sydenham, a past-president of the American Association of Bovine Practitioners (AABP), has lobbied the American Veterinary Medical Association (AVMA) to study the reasons why so few veterinary graduates are joining food animal practices (12). This project is being co-sponsored by the AABP and the AVMA to determine the long-term staffing needs in these types of practices and the consequent effect on food security in the future. This may call for a new approach to conventional large animal medicine in veterinary schools and an integration of medicine, production data and computerisation in large swine, poultry, beef and dairy units. This new medicine is no doubt best practised by a veterinarian with the aid of computers and a database, rather than by a non-medical computer specialist.

## Proposals for increasing the attractiveness of mixed practice and food animal medicine

In the following sections, the authors offer proposals that would make mixed animal practices and in particular food animal medicine more popular and profitable. In Jamaica, those in companion animal practices will soon find that there are too many urban clinics for the number of animals to be serviced. Returning graduates need to find clinics for employment. This will be possible if new and innovative systems are developed in the food animal medicine sector and mixed practices.

### Marketing veterinary practices and personal skills

The JVMA inherited many conservative British attitudes towards the ethics of advertising skills or practices. These attitudes are presently under review. Veterinarians in general are inadequately informed about how to market their practices and/or their personal skills and resources. Most veterinary

colleges devote minimal course time to costing services or the best ways to deal with clients. Brownie stated that so few students registered for an elective course in veterinary practice management at a prominent mid-eastern United States of America veterinary college that the course had to be dropped (C.F. Brownie, personal communication, 1997). An informal, non-statistical survey of senior and final-year students revealed that they felt that academic clinical electives would be far more useful in their professional careers than marketing or management of veterinary practices. The students believed that they could learn these skills later in professional life (i.e. 'catch up') from employers and peers.

However, practice management sessions at international and regional conferences are very popular in North America, and a significant amount of time is devoted to featured motivational speakers to allow them to address specific issues. Many speciality journals are dedicated to improvements in practice management. Several of the modern on-line veterinary networks offer continuing education courses in practice management and customer/client service. They also have consultants available on-line for any queries.

### **Veterinary co-operatives or working partnerships**

Veterinarians who form co-operatives can offer their combined range of skills, such as:

- a) theriogenology
- b) production advice
- c) speciality areas in medicine, such as virology, animal husbandry and parasitology for diagnoses and treatment of ectoparasites, endoparasites and haemoparasites.

These same groups of veterinarians could provide access to therapeutics and parasitocides and even provide other much-needed services. As the economy improves, dairy and pig production may require more sophisticated services, using computerised data analysis and appropriate advisories. Equipment which determines mineral and metabolic profiles for serum samples can assist in maximising production for high-yield stock.

### **Farmer co-operatives**

Dairy farmers with smallholdings in certain regions have formed co-operatives which employ a veterinarian on a part-time basis. Visits are made on a regular schedule and travelling costs are shared among the group. Farmers of less economically viable animals, such as small ruminants, could similarly share services and cut costs. However, the farmers in this particular dairy co-operative, in the parish of Clarendon, were apparently reluctant to pay for veterinary clinical services, though they

were willing to pay for other services (P.A. Cadogan personal communication, 2003). This radical difference in the perception of the various services provided by veterinarians warrants more study.

### **Poultry, swine and aquaculture industries**

These industries are staffed by a minimal number of veterinarians and by a larger number of technical non-veterinary professionals. It seems that, in these industries, the era of veterinarians who prefer to work with their stethoscopes rather than computers has passed. The regional West Indies School of Veterinary Medicine has, so far, failed to produce postgraduates, interns or residents with appropriate specialisations, who would be better equipped to manage such enterprises. No doubt this situation calls for specialised postgraduate programmes. Marine queen conch (*S. gigas*), a large shellfish, is being fished primarily for export, and its processing and packaging requires certain standards of disease prevention and analysis of pollutant residue to comply with EU import standards. Accredited private veterinarians, acting as LVIs, could perform some of these functions. Since Jamaica has a suitable climate, tropical fish are reared in concrete ponds for local sales and export. Clinical care for the fish and official export certification are needed in this industry, and could also be provided by trained LVIs.

### **Disease eradication projects**

Private veterinarians should be available for part-time or occasional full-time duties on surveillance projects and assisting in emergencies. An outbreak of Aujeszky's disease in semi-feral pigs on city dumps in Jamaica was quickly brought under control as a result of the help from private veterinarians during the testing, slaughtering and compensation campaigns. The NWSEP mentioned earlier, though primarily an entomological exercise for releasing sterile male flies, is currently facing problems because of the large urban population of stray dogs with wounds, which maintains the life cycle of the screwworm. At present, the NWSEP employs six veterinarians, three in administrative positions, to monitor the progress of the programme. Before the NWSEP, owners presented their companion animals with infested wounds at veterinary clinics to have the maggots removed under restraint, sedation or anaesthesia. Significant revenue was generated from this treatment, which declined along with the number of infestations as the effects of the programme became significant (Table III).

### **Awareness of veterinary needs**

Farmers with small to moderate-sized farms must be made aware of the need for and advantages of quality veterinary care which improves animal production. Most of these farmers have received a basic level of education and may not recognise the scientific and technical aspects of productivity. Their concern is

primarily to keep the animal alive, rather than to gauge its productivity. This knowledge base can be spread through education campaigns, outreach programmes and the use of trained extension officers, in conjunction with regular meetings of agricultural societies and the extension functions of RADA.

### **Non-competitive co-operation between the Veterinary Services Division and private practitioners**

In the past, in Jamaica, the fully privatised practitioner often welcomed the services provided by the VSD. The VSD often attended to cases in remote locations, otherwise considered uneconomic by the private practitioner. In the privatised service, it appears that there are many responsibilities within the scope of VSD veterinarians and private practitioners that could be shared. There should be no feelings of competition or threat on either side. Various projects and studies can be funded and studied jointly with a true spirit of camaraderie between professionals. This situation does not pose a real problem in Jamaica, but it is worth monitoring, especially as contract work becomes more commonplace and competitive. Removal of unfair competition between VSD veterinarians and private veterinarians can help to stabilise costs to the consumer, but each sector of the profession should avoid a monopoly situation, which would lead to an abrupt increase in service prices.

### **Accrediting private practitioners to perform regulatory duties**

There are insufficient VSD veterinarians to cover the entire island in conducting various regulatory functions. Duties such as the inspection of imported meats and of the documentation of imports which arrive in bulk containers for large hotels or airports are currently being performed by private veterinarians acting as LVIs. Specialised training will assist them to perform these functions and increase confidence in their legal authority to make decisions. Plans are progressing for training and accrediting LVIs in the hazard analysis and critical control point method for food inspection. In Jamaica, LVIs are paid 'sessional' wages to provide a fixed number of sessions or hours per month performing 'public good' duties.

### **Professional development**

It is now accepted that professional development plays a vital role in motivation for better performance and job satisfaction. Continuing education courses can be organised by regional associations, veterinary schools or through on-line opportunities on the Internet. There is a move to include continuing education as a requirement for licensing registration in Jamaica.

### **Scope and outlook of regional veterinary schools**

Regional veterinary schools must be visionary and able to meet the changing requirements and challenges of the future. It is interesting to note that a manpower study conducted before the incorporation of the regional veterinary school of the University of the West Indies in Trinidad did not anticipate that graduates would find job openings scarce in both the public and private sectors in Jamaica as early as 2003. Some of the other Caribbean Islands have already reached their saturation level and veterinarians and returning graduates are emigrating because of lack of opportunities.

Veterinary schools in developing countries face another major challenge, as the result of the privatisation policies endorsed by their funding states. Traditional training programmes, such as those in the regional African schools, principally prepared graduates for State service because of the need for field veterinarians. These programmes are no longer really suitable for the employment situation post-privatisation. Training programmes should focus on the medical and surgical needs of the common species in the region, whether these species are food animals, equines for riding, sport or racing or companion animals (which, in certain regions, are highly valued for sport or show conformation as well as for companionship). Changes in swine and poultry medicine and training in data assimilation should also be incorporated into the curriculum. More importantly, regional schools should also offer continuing education courses.

### **Public and private zoos**

The national zoological gardens, Hope Gardens, in the suburbs of the capital city of Kingston, and one of the island's three private zoos are in indefinite quarantine and are serviced by VSD veterinarians. A second private zoo, which comprises exotic birds, ostriches, emus, llamas and a petting zoo, is serviced by two private veterinarians who each complement the skills of the other. The third private zoo, which includes an ostrich farm, game park and petting zoo, is serviced by its licensed veterinarian/owner.

### **Marine dolphin coves**

Trained dolphins in marine parks are becoming a popular tourist attraction in the Caribbean. These require specially trained assistants and veterinarians to service them. In short, zoo, marine and possibly other veterinary specialisations will be in demand in the near future.

## **Conclusions**

The privatisation of clinical veterinary services in Jamaica can, with some reservations, be considered a success. The clinical

services provided over the years by the VSD were highly subsidised but were never free. The collection of veterinary fees by PVOs, however, was a different matter. With privatisation in September 1992, clinical services were transferred to the private sector. Unfortunately, demand by the livestock industry for these privately provided services has not been as great. This is because at present the livestock industry has serious problems with profitability, due to the trade liberalisation policies and cheap import substitution that occurred simultaneously with privatisation; the problem has been further aggravated by the fact that the economy has been in a downward spiralling decline almost every year since. In Jamaica, the FAO definition of privatisation was not entirely complied with, as there was a shift from mixed animal practice to predominantly pet practice, and not a straight shift to 'private good'. However, with farmer education and extension services, production will once again become the focus of the livestock industry and veterinarians should see their mixed or food animal practices thriving. By 2002, 10 years after privatisation, milk production had decreased from 38.8 million litres to 20.4 million litres, a drop of 53%, nevertheless, the dairy sector remains a potentially profitable industry (8). The broiler industry is one that seems to be surviving competition and has actually increased production. In fact, it cannot meet consumer demand, despite the fact that it is also faced with competition from cheaper imports.

The horse-racing industry, the poultry industry and the large cattle holdings, including those on restored bauxite-mined land, all used to have veterinarians in charge of animal production, now only the poultry industry and bauxite companies still support salaried veterinarians. Animal grazing is an effective way of utilising re-claimed bauxite lands. Companion animals have been serviced by veterinarians at non-subsidised costs, and this became an important source of

revenue to the early pioneers of private practice. The shift to privatisation has meant reduced disease surveillance and a longer reaction time to importation breaches, in addition to ambiguity about the role of the private practitioner in regard to regulatory functions. Jamaica has a remarkably healthy livestock industry, due mainly to the established norms of the past, but if this situation is to continue the vital issue of disease surveillance and quarantine must be continually monitored and reviewed in order to minimise the risk of introducing a foreign exotic disease.

The authors would also like to express their concern in regard to maintaining quality breeding stock. A great deal of work has been invested in improving the quality of these stock over the years, yet this effort is in danger of being lost before production is revitalised. The authors recommend a study of the relationships between practitioners and livestock owners and encourage the farmer of small or medium-sized holdings to make use of clinical veterinary services to improve productivity. A comprehensive study of the future of the livestock industry and its associated services is strongly urged.

Finally, private veterinary practitioners must be prepared to be innovative and motivated, and should make full use of continuing education to further their professional goals.



## Privatisation des services vétérinaires en Jamaïque : étude de cas

V. Lopez, F.C. Alexander & C.L. Bent

### Résumé

En Jamaïque, les services vétérinaires cliniques ont été privatisés en septembre 1992. Les auteurs passent brièvement en revue, à l'aide des quelques informations officielles disponibles, les conditions et la logistique qui ont permis le transfert de responsabilité des services cliniques, considérés comme « bien privé », à des vétérinaires privés. Certains éléments indiquent que ce modèle de privatisation peut fonctionner pour les éleveurs, malgré des problèmes financiers et la baisse de production que connaît le secteur de l'élevage, conséquence des politiques de libéralisation du commerce et du remplacement par des produits importés à meilleur coût. De plus, d'autres problèmes financiers nationaux, liés notamment à la récession économique, ont poussé les vétérinaires à tenter de stimuler la production dans l'industrie de l'élevage, qui souffre d'un manque de ressources structurelles et financières adéquates.

Les auteurs se montrent inquiets, car plusieurs projections non publiées depuis la dernière étude officielle sur l'agriculture en 1996, démontrent que l'industrie de l'élevage est en régression en Jamaïque. Une extinction de certaines lignées de reproducteurs de haute valeur génétique est à craindre. Il est instamment recommandé de mener une étude détaillée sur l'avenir de l'industrie de l'élevage et de ses services connexes.

Dix ans après la privatisation des services vétérinaires cliniques en Jamaïque, les auteurs font le bilan de cette transformation et suggèrent quelques pistes afin d'améliorer la qualité des services offerts par les vétérinaires praticiens privés.

#### **Mots-clés**

Caraïbes – Jamaïque – Prestation de service de santé animale – Privatisation – Service clinique – Service vétérinaire.



## **Estudio sobre la privatización de los servicios veterinarios en Jamaica**

V. Lopez, F.C. Alexander & C.L. Bent

#### **Resumen**

En Jamaica, los servicios veterinarios clínicos fueron privatizados en septiembre de 1992. A partir de los escasos datos oficiales, los autores examinan sucintamente las premisas y la logística a que recurrió el Estado para delegar en veterinarios privados la responsabilidad de los servicios clínicos, que cabe considerar 'de interés privado'. Hay razones para pensar que este modelo de privatización puede funcionar para los ganaderos, pese a los problemas económicos que conoce el sector pecuario y a la caída en la producción causada por los programas de liberalización del comercio y la sustitución de la producción nacional por productos importados más baratos. El país tiene además otros problemas económicos, como el bajón que ha experimentado la economía, que han dejado solos a los veterinarios en su esfuerzo por impulsar la producción de un sector ganadero carente de estructuras financieras y recursos suficientes.

Los autores se muestran inquietos porque varias proyecciones inéditas, realizadas tras el último censo agrícola oficial de 1996, apuntan a una merma del sector ganadero. Es posible que se pierda para siempre el valioso patrimonio genético de ganado reproductor. Urge pues emprender un estudio exhaustivo sobre el porvenir del sector ganadero y los servicios asociados a él.

Transcurridos diez años, los autores reflexionan sobre la privatización de los servicios veterinarios clínicos en Jamaica y formulan varias propuestas para mejorar la calidad del servicio que ofrecen los veterinarios privados.

#### **Palabras clave**

Caribe – Jamaica – Prestación de servicios de sanidad animal – Privatización – Servicio clínico – Servicio veterinario.



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