# ADMINISTRATIVE JUSTICE AND COMMUNAL SUBSISTENCE FARMING IN FOOT-AND-MOUTH DISEASE CONTROL: THE POSSIBLE APPLICATION OF PROPORTIONALITY AS A GROUND OF REVIEW UNDER THE PROMOTION OF ADMINISTRATIVE JUSTICE ACT 3 OF 2000

*by Lielie Viljoen* & MP Fourie***

**Abstract**

*As one of the most contagious and economically impactful livestock diseases, foot-and-mouth disease presents South African lawmakers with the complicated issue of animal disease control. The regulation of the disease has a profound impact not only on commercial farmers but on communal subsistence farmers as well, whose stakes in control measures are often overlooked in policy-making. The authors investigate and crystalise the current legislative framework of foot-and-mouth disease control in South Africa against the backdrop of the scientific and epidemiological characteristics of the disease. The application of the Promotion of Administrative Justice Act 3 of 2000 (PAJA) to the control measures concerning the movement of animals is investigated and it is concluded that PAJA's administrative law requirements apply to both the Animal Diseases Regulations and the policy documents in question. Thereafter the administrative law concept of proportionality is set out and it is shown that the current control measures fall short of the requirements of proportionality as*

* BVSc (penultimate), University of Pretoria. ORCID iD: 0000-0003-2403-9260.
** BCom Law (*cum laude*), University of Pretoria; LLB (finalist), University of Pretoria. ORCID iD: 0000-0002-0358-0317.

*codified in PAJA. Especially when considering the necessity and balance of the control measures in question, it is found that the interests and rights of small-scale communal subsistence farmers are not adequately considered and that international standards, regardless of their applicability to the South African situation, are often blindly imposed, thus leaving these overlooked stakeholders vulnerable to the adverse effects that arise thereafter.*

# 1 Introduction

Foot-and-mouth disease (also referred to as FMD) is one of the most impactful animal diseases worldwide, particularly in Southern Africa where more than 100 million people living in poverty are dependent on livestock as an inherent part of their lives and livelihoods.[1] The control of this multifaceted and often misunderstood disease in the context of balancing diverse stakeholder interests is not only a vital public function but also one in which public powers directly impact the lives of animals and humans alike.

In light of the impact of the measures implemented to control foot-and-mouth disease on lives, livelihoods, and access to international markets, it seems natural that principles of fairness and proportionality should not only be relevant but central in these decisions. It is thus of vital interest to consider whether the standards of administrative justice encapsulated by the Promotion of Administrative Justice Act[2] (PAJA) apply to the control measures implemented. This article will first set out the scientific context of FMD, crystalise the legal framework in which it is combatted, and discuss the specific South African movement control measures, their efficacy, and impact, as well as their effect on communal subsistence farmers. Secondly, the control measures will be evaluated against the tenets of South African administrative law to determine whether they fall under PAJA's purview. Finally, the implications of proportionality as a possible ground of administrative review will be examined.

# 2 Foot-and-mouth disease

## 2.1 Importance and aetiology

Foot-and-mouth disease has long shaped our understanding of pathogen dynamics and veterinary epidemiology. In 1546, Giolama Fracastoro proposed the concept of epidemic diseases and an early germ-theory of contagious disease after an epizootic disease spread

1 PK Thornton et al *Mapping Poverty and Livestock in the Developing World* (2002) at 124.

2 Promotion of Administrative Justice Act 3 of 2000 (PAJA).

through herds of cattle in Venice.[3] As an aetiological agent of FMD, the foot-and-mouth disease virus (FMDV) was the first virus to be described as causative of an animal disease.[4] FMDV has since not only served as a model for virological research, but also aids in the continual restructuring of virology and vaccinology knowledge bases,[5] which improves the understanding of other unresearched diseases. The importance of FMD in driving these research efforts is not ill-founded. Arguably, as the most transmissible viral animal disease,[6] it causes high morbidity rates and large-scale epidemics that, although of lesser clinical significance, have diversely impacted the livestock industry for many years.

FMD is a highly contagious viral disease which affects cloven-hoofed animals.[7] It is caused by the foot-and-mouth disease virus, of the genus *Aphthovirus* in the family *Picornaviridae*,[8] which affects a wide vertebrate host range,[9] and includes the polio and hepatitis A viruses as well as the human common cold rhinovirus.[10] Although all cases of FMD are caused by a single viral species, its evolution in different ecological niches[11] has caused differentiation over time on a clinical as well as a microscopic level resulting in different strains, serotypes, and prototypes that allow for the geographical tracking of the disease or outbreak origin. As is the case for many RNA viruses, FMDV populations are described as having a quasispecies structure[12] which departs from the view that virus populations are genetically stable even over short periods of observation. This mutation is accelerated by the antigenic heterogeneity[13] of the virus and high

3 H Fracastorius *De contagione et contagiosis morbis et curatione* (1546) at 77.
4 F Loeffler & P Frosch 'Summarischer bericht uber die ergebnisse der untersuchungen der kommoission zur erforchung der maul-und-kla- menseuche' (1897) 22 *Zentralbl. Bakteriol. Parasitenk. Infektionskr* at 257-259.
5 F Sobrino et al 'Foot-and-mouth disease virus: A long known virus, but a current threat' (2001) 31(1) *Veterinary Research* at 2.
6 H Pereira 'Foot-and-mouth disease' in E Gibbs (ed) *Virus Disease of Food Animals Vol II* (1981) at 334.
7 F Sobrino & E Domingo *Foot and Mouth Disease Virus: Current Research and Emerging Trends* (2017) at 13.
8 E Martinez-Salas & G Belsham 'Genome Organization, Translation and Replication of Foot-and-mouth Disease Virus RNA' in F Sobrino & E Domingo *Foot and Mouth Disease Virus: Current Research and Emerging Trends* (2017) at 16.
9 M Yinn-Murphy & J Almond 'Chapter 53: Pecornaviruses' in S Baron (ed) *Medical Microbiology* (1996) at 984.
10 D Tully & M Fares 'The tale of a modern animal plague: Tracing the evolutionary history and determining the time-scale for foot-and mouth-disease virus' (2008) 382(2) *Virology* at 250-256.
11 S Metwally 'International and regional reference laboratory network' (2012) Presented at FAO/OIE Global Conference on Foot and Mouth Disease Control *Session 4: Key elements in the prevention and control of FMD and in implementing the strategy* at 91.
12 E Domingo et al 'Nucleotide sequence heterogeneity of the RNA from a natural population of foot- and-mouth-disease virus' (1980) 11 *Gene* at 333.
13 E Domingo & J Holland 'RNA virus mutations and fitness for survival' (1997) 51 *Annual Review Microbiology* at 151.

mutation rates[14] which highlight evolutionary pressures and drivers of selection. These evolutionary drivers are significant when pathogen and animal dynamics are discussed as epidemiological considerations, especially when considering the differing dynamics and drivers in European and African geographical regions.[15] There are seven serotypes of the FMDV with distinct genetic lineages[16] and characteristic geographical distributions.[17] The abovementioned antigenic heterogeneity caused several major lineage diversifications in the evolution of FMDV.[18] The first lineage diversification led to the branching off of the Southern African Territories serotypes (SAT 1,2,3),[19] from the Eurasian serotypes (A, O, C, and Asia1).[20] The relevance of evolutionary timelines is clear in differing severity of disease between serotypes, with a higher degree of similarity between serotype clusters. These differing pathogen dynamics in different regions are integral to understanding FMD epidemiology.

## 2.2 Epidemiology

As one of the most economically influential animal diseases worldwide, the epidemiology of FMD, although not yet fully understood, has been thoroughly dissected into different factors. The host characteristics, transmission, disease development, and human involvement should be fully unpacked before holistic epidemiological insight might be gained into the interaction between the abovementioned factors.

The host dynamics are important on an inter and intra-species level. FMD has a wide host range, including all cloven-hoofed animals. The pathogenesis and clinical presentation vary between and within hosts depending on breed, age, and husbandry methods.[21] The most

14 E Domingo et al 'Evolution of foot-and-mouth disease virus' (2003) 91 *Virus Research* at 53.

15 The impact of evolutionary drivers and the context in which differing strains evolved further will be discussed later in the article. These drivers are one of the most important considerations in FMD control worldwide as the current 'one-size-fits-all' policy approach often overlooks these important epidemiological considerations and their implication for the efficacy of control measures.

16 Tully & Fares (n 10) 251.

17 N Knowles & A Samuel 'Molecular epidemiology of foot-and-mouth disease virus' (2003) 91(1) *Virus research* at 71.

18 Sobrino (n 5) 17.

19 M Martínez et al 'Evolution of capsid protein genes of foot-and- mouth disease virus: antigenic variation without accumulation of amino acid substitutions over six decades' (1992) 66 *Journal of Virology* at 3557.

20 J Dopazo 'Aphthovirus evolution' in A Gibbs & C Calisher (eds) *Molecular evolution of viruses* (1994) at 310-320.

21 C Nfon et al 'Clinical Signs and Pathology of 8 Foot-and-mouth Disease' in F Sobrino & E Domingo *Foot and Mouth Disease Virus: Current Research and Emerging Trends* (2017) at 171.

important susceptible domestic species are cattle, swine, sheep, and goats.[22] Cattle are the domestic species most likely to develop the clinical disease and are also the primary concern on a trade and economic level. A short incubation period in cattle is followed by fever and viraemia, which precedes clinically detectable vesicle development,[23] thus causing a rapid spread within populations by the time diagnosis is likely to take place. Vesicles develop on the buccal surface, tongue, and dental pad, often first indicated by excessive salivation and lip-smacking before larger erosions develop from coalescing vesicles.[24] Lesions on the feet also develop within the same timeframe, mostly on the coronary band and interdigital spaces[25] which leads to weight shifting lameness. The impact on livestock production stems not only from a decreased feed intake, but also from a decreased feed efficiency over a protracted period.[26] These impacts are of little significance to communal smallholders that are most concerned with the survival and welfare of animals, but are of cardinal importance to large commercial farming operations where small changes in large-scale productivity can lead to significant economic losses.[27] Similar clinical signs are observed in pigs, however, they require a much higher infective dose[28] to contract the disease and excrete increased quantities of airborne viruses.[29] In small ruminants, (sheep and goats) clinical signs are often less severe and resolve faster.[30] The differing manifestations of FMD between species contribute to the complexity of controlling the spread and development of the disease, especially in countries where co-mingling of different livestock species takes place in communal farming systems and sylvatic cycles.

If seen in conjunction with interspecies dynamics, a severe complication is the duration of infectivity, directly increasing the infective reach of each animal in and between herds. In most

22 S Alexandersen & N Mowat 'Foot-and-Mouth Disease: Host Range and Pathogenesis' in B Mahy (ed) *Foot-and-Mouth Disease Virus* (2005) at 10.
23 M Grubman & B Baxter 'Foot-and-mouth Disease' (2004) 17 *Clinical Microbiological Review* at 468.
24 J Rhyan et al 'Foot-and-mouth disease in North American bison (Bison bison) and elk (Cervus elaphus nelsoni): Susceptibility, intra- and interspecies transmission, clinical signs and lesions' (2008) 44 *Journal of Wildlife Diseases* at 270.
25 S Alexandersen et al 'The pathogenesis and diagnosis of foot-and-mouth disease' (2003) 129 *Journal of Comparative Pathology* at 15.
26 JD Knight-Jones & J Rushton 'The economic impacts of foot and mouth disease — What are they, how big are they and where do they occur?' (2013) 112(3) *Preventive Veterinary Medicine* at 161.
27 AD James & J Rushton 'The economics of foot and mouth disease' (2002) 21(3) *Revue scientifique et technique-office international des epizooties* at 638.
28 RF Sellers 'Quantitative aspects of the spread of foot and mouth disease' (1971) 41 *Veterinary Bulletin* at 431.
29 AI Donaldson et al 'Air sampling of pigs infected with foot-and-mouth disease virus: Comparison of Litton and cyclone samplers' (1982) 33 *Research in Veterinary Science* at 384–385.
30 AI Donaldson & RF Sellers 'Foot-and- mouth disease' in WB Martin and ID Aitken (eds) *Diseases of Sheep* (2000) at 254–258.

domestic animals, infective long-term carriers emerge,[31] and the length of these carrier states varies between species. These carrier states last up to three and a half years in cattle, five years in African buffalo[32], and only nine days in pigs.[33] The length of the carrier state is very relevant to FMD dynamics in different species and herds as the latent presence of FMD in carriers is a significant source of infection.

It is important to note, however, that the clinical signs vary in severity, and the description above only describes a full set of clinical symptoms. Endemic populations in South Africa infected with SAT serotypes often develop less severe symptoms.[34] The morbidity (symptom development) rates in populations affected by the SAT serotypes are 3.3% on average, with the Eurasian strains causing 35.4% average morbidity over the same period,[35] clearly painting a very different epidemiological picture in African regions when compared to their Eurasian counterparts. Although an asymptomatic presence of the disease may decrease its implications for the animals' welfare, an asymptomatic carrier that is still shedding is of increased epidemiological and economic importance by posing a greater danger to 'disease-free' statuses, as will be discussed below. The large 'outbreak' that occurred in KwaZulu-Natal in 2011 was reported to the World Organisation of Animal Health (OIE) as being fully subclinical,[36] yet the fact that it was reported still led to trade implications and estimated losses of R8 billion for the red meat industry.[37] Not only is the control of an asymptomatic animal more difficult to diagnose, but decreased compliance with movement restrictions and quarantines also protracts the dissolution of such outbreaks simply because stakeholders, especially those not involved in the export industry, fail to realise the necessity of such measures.

31 Alexandersen et al (n 25) 2. Fifty percent of populations under experimental conditions persistently become infected.
32 Alexandersen et al (n 25) 19.
33 C Stenfeldt et al 'Duration of Contagion of Foot-and-Mouth Disease Virus in Infected Live Pigs and Carcasses'(2020) 7 *Frontiers in Veterinary Science* at 334.
34 GR Thomson & W Vosloo 'Natural Habitats in which Foot-and-Mouth Disease Viruses are Maintained' in F Sobrino & E Domingo *Foot and Mouth Disease Virus: Current Research and Emerging Trends* (2017) at 179.
35 Thomson & Vosloo (n 34) 179.
36 DD Lazarus et al 'Serological evidence of vaccination and perceptions concerning Foot-and-Mouth Disease control in cattle at the wildlife-livestock interface of the Kruger National Park, South Africa' (2017) 147 *Preventative veterinary medicine* at 18.
37 N Twala 'Failure to implement Animal Diseases & Meat Safety Acts: Urgent appeal by Red Meat Industry Forum, National Emergent Red Meat Producers' Organisation, African Farmers Association' 12 September 2011 https://pmg.org.za/committee-meeting/13388/ (accessed 12 May 2020).

Wild ruminants are also of significant epidemiological importance with the pertinent species being the water buffalo in Asia and South America where they are intensively reared, as well as the African buffalo that serve as important reservoirs of the virus in Africa.[38] Wildlife mostly harbour the virus subclinically[39] whilst still shedding the virus to other wildlife and domestic species.[40] Wildlife species also typically display carrier states of a longer duration which increases the likelihood of sylvatic transmission through occasional contact with livestock. Again, this is of particular importance in Southern Africa where communal farming often entails mixed livestock herds being exposed to wildlife and, consequently, to FMD[41]V. The presence of massive numbers of endemic FMDV in buffalo, and the unthinkability of eradicating this consistent source of infection is one of the key considerations in the epidemiology and control of FMD in South Africa.[42]

The last important epidemiological factor at play in the spread and persistence of FMD is the movement of animals. This is important for the evaluation of the efficacy of control measures and legislation. The movement of livestock, wildlife, and animal products is directly involved in pathogen spread along unnatural lines to different areas. The movement of commercial livestock during auctions and feedlots, for example, is responsible for large-scale animal movement and co-mingling of diverse groups thus posing a high risk for rampant spread should an infected animal be present at any level of the production system.[43] The movement of livestock in communal farming systems is less documented,[44] and while significant in the sylvatic spread of the disease,[45] the scale and speed of spread is a fraction of that in commercial settings and far outweighed by the livelihood of

38 W Vosloo et al 'Characterisation of a SAT-1 outbreak of foot-and-mouth disease in captive African buffalo (Syncerus caffer): Clinical symptoms, genetic characterisation and phylogenetic comparison of outbreak isolates' (2007) 120(3) *Veterinary Microbiology* at 228.

39 TJD Knight-Jones et al 'Global Foot-and-Mouth Disease Research Update and Gap Analysis: 2 — Epidemiology, Wildlife and Economics' (2016) 63 *Transboundary and Emerging Diseases* at 15.

40 B Blignaut et al 'Characterization of SAT2 foot-and-mouth disease 2013/2014 outbreak viruses at the wildlife-livestock interface in South Africa' (2019) 67 *Transboundary and Emerging Diseases* at 1597.

41 GR Thomson et al 'Balancing Livestock Production and Wildlife Conservation in and around Southern Africa's Transfrontier Conservation Areas' (2013) 60 *Transboundary and Emerging Diseases* at 493.

42 F Jori & E Etter 'Transmission of foot and mouth disease at the wildlife-livestock interface of the Kruger National Park, South Africa- Can the risk be mitigated' (2016) 16 *Preventative veterinary medicine* at 17.

43 James & Rushton (n 27) 638.

44 T Tekleghiorghis et al 'Foot-and-mouth Disease Transmission in Africa/ Implications for Control, a Review' (2016) 63 *Transboundary and Emerging Diseases* at 136.

45 W Volsoo et al 'Review of the status of foot and mouth disease in sub-Saharan Africa' (2019) 21(3) *Revue scientifique et technique International Office of Epizootics* at 440.

smallholders. Animal product movement only causes a risk of infection when hides, hearts, glands, and/or whole carcasses are transported. The transport and consumption of mature, deboned meat poses no threat of FMD transmission even if diseased animals were slaughtered at the acute stage of the disease.[46] This has been the basis for many movements calling for a commodity-based trade of animal products, as will be discussed in the fourth section of this article.

Epidemiological factors relevant to the discussion of regulations instituted around FMD highlight the intricacy of disease spread. Pathogen or virus dynamics, host factors, interspecies transmission, and animal movement patterns in different animal husbandry systems are all factors to be considered in the transmission of FMD. These considerations find application in the control of the disease, policies instituted to do so, and the stakeholders involved in the livestock industry.

# 3 The legal framework of the control of FMD in South Africa

In order to evaluate the FMD control measures against the requirements of South African administrative law, it is first necessary to determine who the relevant legal operators are, and under which legal instruments they act. This section will consequently crystalise the legislative framework for the control of animal diseases generally, and foot-and-mouth disease specifically.

## 3.1 The Animal Diseases Act

The Animal Diseases Act (ADA) provides the main national legislative framework in terms of which animal diseases and parasites are confronted by the government.[47] The purpose of the Act has been elucidated by the Supreme Court of Appeal as authorising government action to 'initiate measures to protect the country's livestock against risk of disease'.[48] The ADA provides for a range of powers and duties of a number of important actors, namely animal owners or managers of land on which there are animals,[49] the Director of the Directorate of Animal Health (the Director), the Minister of Agriculture (the Minister), and state veterinarians.

46 E Ryan et al 'Foot-and-Mouth Disease Virus Concentrations in Products of Animal Origin' (2008) 55 *Transboundary and Emerging Diseases* at 90.
47 Animal Diseases Act 35 of 1984 (ADA).
48 *Kemp and Others v Van Wyk and Others* (335/2004) [2005] ZASCA 77 para 10.
49 ADA (n 47) sec 11.

With regard to the application of the Act and the legislation discussed below; a few related terms defined in the ADA are of particular importance. The first is that of an 'animal disease', defined as follows:[50]

> [A] disease to which animals are liable and whereby the normal functions of any organ or body of an animal is impaired or disturbed by any protozoon, bacterium, virus, fungus, parasite, other organism or agent.

This is clearly a broad definition, and the regulatory framework is further qualified by the second definition of a 'controlled animal disease':[51]

> [A]ny animal disease in respect of which any general or particular control measure has been prescribed, and any animal disease which is not indigenous or native to the Republic.

The 'general or particular control measures' are prescribed in terms of section 9 of the Act[52] and can be prescribed by the Minister for any 'controlled purpose', which includes:[53]

> [T]he prevention of the bringing into the Republic, or the prevention or combating of or control over an outbreak or the spreading, or the eradication, of any animal disease or, where applicable, of any parasite.

The application of the control measures envisioned by section 9 of the Act thus rests upon two important tenets. The first is the nature of the phenomenon being classified as an animal disease. The second is the purpose of the intervention; being confined to the prevention of bringing such a disease into the country, preventing or controlling an outbreak or spread of the disease, or eradicating the disease.

Section 9(2) describes the aspects of combatting animal disease to which the control measures may relate. It should be noted that the power to prescribe such control measures is granted to the Minister.[54] These are wide-ranging and cover the powers and duties of the owners of diseased or suspected diseased animals, the restriction or control of the slaughter of diseased animals, the transportation of animals from areas where an animal disease is or is suspected to be present, the powers and duties of the Director, the manner and form in which information must be collected and recorded, and even the movement and decontamination of conveyances and persons over and from areas where a diseased animal has been present.[55] Section 9(2)(h) authorises the Minister to prescribe control measures relating to any

50 ADA (n 47) sec 1, 'animal disease'
51 ADA (n 47) sec 1, 'controlled animal disease'.
52 ADA (n 47) sec 1 & 9, 'control measures'.
53 ADA (n 47) sec 1, 'controlled purpose'.
54 ADA (n 47) sec 9(1).
55 ADA (n 47) sec 9(2). The section prescribes the incidences to which control measures may relate in great detail. Only the overview of the breadth of the cover is relevant for the current investigation.

matter deemed expedient or necessary concerning the 'controlled purpose', diseased (or suspected diseased) animals, or any animal disease or parasite. Thus, the powers of the Minister in this regard are comprehensive.

The Minister is also, in terms of section 31 of the Act, empowered to issue certain regulations. These are focussed on two specific and two general areas. The regulations may, in terms of section 31(1)(a) and (b) firstly prescribe measures with regard to the isolation of diseased animals, and secondly, to the treatment or destruction of such animals. Section 31(1)(c) then authorises the Minister to make regulations in terms of any matter required or permitted by the ADA. The control measures permitted in section 9 would fall under such regulations. Section 31(1)(d) authorises regulations relating to the necessary and expedient achievement of the purpose of the ADA.

### 3.2 The Animal Diseases Regulations

The Regulations to the ADA (the Regulations) originally took effect with the ADA on 01 October 1986. They derive their legal authority from the power granted to the Minister under section 31 of the Act.[56]

The Regulations prescribe a host of general control measures for the combatting of animal disease. Central to the current enquiry, it also prescribes specific control measures for different animal diseases. These prescriptions relate to two types of measures; (a) the geographic movement and (b) the treatment of animals in the case of specific animal diseases. These control measures are set out in Tables 1 and 2 of Annexure A of the Regulations.

Table 1 outlines certain areas in the Republic relating to control measures. These areas relate to Regulation 20(1)(a)(vi) which prohibits the movement of any controlled animal or thing from or to the outlined areas. It is important to note that here, 'controlled animal' refers to any animal in terms of the ADA,[57] and not to susceptible, contact, or infected animals only. The areas outlined in Table 1 relating to foot-and-mouth disease are divided into zones based on six provinces (Limpopo, Mpumalanga, KwaZulu-Natal, North-West, Northern Cape, and Gauteng) and are further divided into infected zones, protection zones, and high surveillance areas of the

56 Animal Diseases Regulations No. R2026 inGovernment Gazette No. 10469 of September 1986 (first published) (Regulations). The regulations have since been variously amended and corrected. Where an amended regulation is applicable, it will be indicated in the reference.

57 ADA (n 47) sec 1, 'controlled animal'. It is interesting to note that the definition of 'animal' in the ADA, being 'any mammal, bird, fish, reptile, or amphibian which is a member of the phylum vertebrates', actually includes humans as well. This is not to suggest that the Act was intended to apply to humans and human diseases, but rather to point out the importance of exactness in legislative drafting, especially concerning definitional aspects.

free zone. These classifications of zones have no bearing on the Regulations themselves, which as shown above, simply prohibit animal movement from and to all zones mentioned in the Table, subject to an issued permit. This is an important incongruity in drafting as the Veterinary Practice Notice (VPN)[58] prescribes very specific control measures to each of the different zones. This will be discussed in more detail below.

Table 2 outlines veterinary acts relating to the treatment or control of animals in relation to different diseases. Animals are organised into three categories. 'Susceptible animals' relates to the type of animal vulnerable to the disease, set out for each disease in column 1 of the table.[59] 'Contact animals' are susceptible animals that have been in contact with an infected animal.[60] 'Infected animal' is a susceptible animal that is either infected or reasonably suspected to be infected.[61] The table then accordingly prescribes the veterinary acts applicable to each different class of animal for each specific disease. The Table 2 control measures relate to a few regulations, of which the most important is Regulation 11(1) which mandates owners to apply the prescribed veterinary acts. An owner may receive a postponement for compliance from the responsible state veterinarian,[62] or an exemption from the Director.[63] The veterinary acts prescribed for foot-and-mouth disease mandate the regular vaccination of susceptible animals at intervals determined by the Director.[64] Contact animals are not prescribed a specific veterinary act but must simply be 'isolated and dealt with as determined by the Director'.[65] Similarly, infected animals must be isolated and either immunised or disposed of as determined by the Director.[66]

The bounds and nature of the Director's powers in terms of the Regulations are clearly set out. The Director may direct the intervals of vaccinations of susceptible animals and may direct what must be done with contact and infected animals. The Director may also exempt owners from compliance with these measures. The Director does not, however, have any discretion in setting out areas from and to which movement is prohibited as this must be done by the Minister through an amendment of the Regulations. Furthermore, while Regulation 20(1)(*a*)(iv) empowers the Minister to extend permits for

58 Veterinary Procedural Notice for Foot and Mouth Disease Control in South Africa June 2012 (VPN).
59 ADA (n 47) sec 1, 'susceptible animal'.
60 ADA (n 47) sec 1, 'contact animal'.
61 ADA (n 47) sec 1, 'infected animal'.
62 ADA (n 47) sec 2(a).
63 ADA (n 47) sec 2(b).
64 Regulations (n 56) Annexure A, Table 2, column 4.
65 Regulations (n 56) Annexure A, Table 2, column 5.
66 Regulations (n 56) Annexure A, Table 2, column 6.

the movement of 'controlled animals' in terms of the Act, Regulation 20(7) further provides a blanket ban on the movement of cloven-hoofed animals from FMD infected zones to protected and free zones, as described in Table 1.

### 3.3 The Veterinary Procedural Notice

The VPN is a policy document that was effected by the Director of Animal Health on 01 November 2014. It replaces the previous Veterinary Procedural Notice of 2012 and provides for a number of measures including complex movement controls and permits, the vaccination plans of animals, the designation of abattoirs, and surveillance and early detection measures.[67] It also undertakes the description of a geographical division of South Africa into infected zones, protected zones with vaccination, protected zones without vaccination, high surveillance zones with movement control, high surveillance zones of the free zone, and the free zone.[68] The details, efficacy, and impact of these measures will be discussed in the fourth section of this article.

The VPN purports to derive its legal basis from the ADA and the Regulations.[69] According to Article A.4.1.1., its purpose is to prevent the spread of foot-and-mouth disease in South Africa. Importantly, it does not attempt to provide a protocol for an FMD outbreak, but simply outlines normal control measures for disease prevention and containment. The VPN is applicable 'for all role players who are involved in FMD control'. No deviation is allowed from the VPN by state veterinarians, other veterinary officials, or other persons and role-players involved in FMD control.[70] This includes owners of animals or owners of land within FMD controlled areas.[71]

The VPN is a long and detailed document, as can be expected from a notice that aims to prevent the spread of an epidemiologically complicated disease. While the rationality of the geographical-based approach to preventing the spread of FMD might be questioned, any control measures prescribed will be complex, taking factors such as species susceptibility, the morbidity and mortality of the disease, and the specific serotypes of the disease into consideration. In the opinion of the authors, it is not only a scientific fact but a logical given that effective disease control critically depends on the nature of the disease. It is then curious that the scheme by which the Regulations aim to install control measures for FMD (and a range of other animal diseases) turns the 'disease-first' approach on its head. It firstly

67 VPN (n 58) Art A.4.1.2.
68 VPN (n 58) Art B.3.
69 VPN (n 58) Art A.4.1.
70 VPN (n 58) Art A.4.4.
71 VPN (n 58) Art B.4.

provides general control measures and classifications, and then subdivides diseases accordingly.

The Director's role and powers in formulating the VPN are encapsulated within a combination of Regulations. The most notable of these are columns 4, 5, and 6 of Table 2 of the Regulations which confer discretion on the Director as discussed above. Table 1 does not confer power on the Director but nonetheless forms an important part of the VPN's authority as the geographical areas used by the VPN are used in reference to Table 1. The VPN makes this clear in Article B.3. What is interesting about this is that the VPN thus combines the discretion granted by the Director in Table 2 and the areas of Table 1 in formulating the FMD control measures. This is important as it means the authority of the VPN is derived, (a) indirectly from the Minister's power to make Regulations, as encapsulated in section 31 of the ADA, and (b) directly from section 31, as part of the Regulations. Ultimately, the VPN derives its authority and mandate solely from the stipulations of the ADA.

## 4 Foot-and-mouth disease control in South Africa: Efficacy and impact

The control of FMD in South Africa, as detailed in the VPN, relies on a zonal approach where different control measures are implemented in infected and protection zones. These aim to maintain the World Organisation of Animal Health's (OIE) endorsed status of 'FMD-free with infected zones',[72] with the majority of the country's livestock rearing areas being in the free zone. Although recent outbreaks have led to the suspension of the free status,[73] the control measures have yet to be adapted accordingly. The FMD infected zone[74] mostly consists of nature reserves, mainly the Kruger National Park, with the FMDV endemic cycling in carrier buffalo and other susceptible antelope. Protection zones[75] are then adjacent to the Northern and Western borders of the infected zone and divided into three different sub-zones serving as immunological (vaccines) and clinical (surveillance) safeguards against the potential spread of FMD from the infected zone into the free zone.[76] The first two parts of the protection zones form the buffer zone. The first is directly adjacent

72 Blignaut (n 40) 1596.
73 As above.
74 F Jori et al 'A qualitative risk assessment of factors contributing to foot-and-mouth disease outbreaks in cattle along the western boundary of the Kruger National Park' (2009) 28(3) *Revue scientifique et technique International Office of Epizootics* at 920.
75 OL van Schalkwyk et al 'Description of Events Where African Buffaloes (Syncerus caffer) Strayed from the Endemic Foot-and-Mouth Disease Zone in South Africa 1998–2008' (2016) 63(3) *Transboundary and emerging diseases* at 334.
76 Vosloo et al (n 45) 445.

to the infected zone and vaccination takes place every four months.[77] The second part, known as the buffer zone without vaccination, requires clinical surveillance at 14-day intervals. The third part of the protection zone, known as the surveillance zone, requires clinical surveillance of livestock at intervals of 28 days.

FMD control measures in South Africa entail four primary methods:[78] the movement control of cloven-hoofed animals and animal products, clinical livestock surveillance, selective prophylactic vaccination, and disease control fences.

Strict movement control is applicable in the infected and protection zones,[79] restricting the movement of any cloven-hoofed animal into or out of these areas. For livestock farmers in these areas, 80% of which are communal farmers,[80] the implication is that nearly no trade in livestock is possible, with absolutely no access to national or international markets and auctions. A national permit system is also implemented where the movement of any cloven-hoofed animal between FMD zones must be approved by the Provincial Executive Officer (PEO), and any movement of free buffalo requires PEO approval in both the province of origin and destination.[81] Additional movement restrictions are applicable in an outbreak situation[82] which might entail additional quarantine or culling protocols.

Clinical surveillance is applied at different intervals in each zone (as discussed above),[83] and entails clinical inspection of tongues, buccal cavities, and the coronary bands of animals.[84] The efficacy of clinical monitoring has been questioned as a mild disease can often go unnoticed.[85]

Prophylactic vaccines of cattle, small stock, and pigs are administered on a zone-based vaccine protocol.[86] All livestock in both the infected zones and protection zones with vaccination are vaccinated every four months and permanently branded to ensure that circulating viral shed from these animals cannot spread to susceptible animals through accidental contact.

Game-proof fences are the main measure instated against sylvatic FMD transmission and are 2.4 metres in length, with the bottom metre being closely strained to prevent the movement of small stock and

77 Lazarus et al (n 36) 8.
78 LC Roberts & GT Fosgate 'Stakeholder perceptions of foot-and-mouth disease control in South Africa' (2018) 156 *Preventive veterinary medicine* at 40.
79 VPN (n 58) Art C.4.
80 Vosloo et al (n 45) 439.
81 VPN (n 58) Art A.5.14.
82 VPN (n 58) Art A.4.1.3.
83 VPN (n 58) Art C.2.
84 Vosloo et al (n 45) 425.
85 D Kennedy et al 'Difficulties experienced in recognizing foot-and-mouth disease in an outbreak in Zimbabwe' (1984) 61 *Australian veterinary Journal* at 164.
86 VPN (n 58) Art C.3.

game.[87] It is also the responsibility of all owners of live buffalo to ensure that game-proof fences prevent contact between their buffalo and other livestock.[88] Game-proof fences have a devastating environmental impact as they are both hazardous to wildlife[89] and disruptive of the natural habitus thus undermining the very purpose of conservation areas.[90]

These control measures cause considerable losses not only to the South African livestock industry and the livelihoods it sustains, but also to the environment. The disruption caused by these measures provides an incentive to not only re-evaluate its efficacy, but also to question the aims and justifiability thereof. The necessity of considering alternative control approaches has especially become clear following recent outbreaks and the harsh effects of a zonal approach to FMD control.[91] The commodity-based trade approach to FMD control is gaining popularity among epidemiologists and industry stakeholders. This approach is focused on the safety of the meat product itself rather than the FMD status of broad geographic regions.[92] This would result in decreased disruption of traditional farming and conservation activities and will benefit the South African meat industry as a whole.[93]

Apart from the cost of control measures, the economic impact of FMD lies in the decreased productivity of high producing animals, the persistent long-term decrease in the production of commercial animals, and trade implications, and the access to lucrative export markets.[94] When considering the economic benefits gained from eradicating FMD, it must be noted that these are often unequally distributed.[95] This is of particular importance in South Africa where the majority of control costs and cullings will have to take place in communal subsistence farming communities sharing pastures with

87 VPN (n 58) Art A.5.7.2.b.
88 VPN (n 58) Art A.4.9.
89 M Owen & D Owen 'The fences of death' 34 *African Wildlife* at 25.
90 ME Gadd 'Barriers, the beef industry and unnatural selection: a review of the impact of veterinary fencing on mammals in Southern Africa' (2012) 13 *Fencing for conservation* at 154.
91 A Catley et al 'Communities, commodities and crazy ideas: Changing livestock policies in Africa' (2005) 36(2) *Institute of Development Studies Bulletin* at 96.
92 G Thomson et al 'Guidelines on Commodity-based Trade Approaches for Managing Foot and Mouth Disease Risk in Beef in Southern Africa' (2018) *Technical Report on behalf of Cornell University's AHEAD Program* at 10.
93 Thomson et al (n 92) 8.
94 G Thomson et al 'International trade Standards for commodities and Products Derived from Animals: The need for a system that integrates food safety and animal disease risk management' (2013) 60 *Transboundary and Emerging Diseases* at 509.
95 A McLeod & J Leslie 'Socio-economic impacts of freedom from livestock disease and export promotion in developing countries' (2000) 3 *Livestock Policy Discussion Paper* at 9.

endemic FMDV infected buffalo that will reap no benefits from access to the export market.[96] The continued costs and questionable efficacy of control measures, in light of sustained sporadic outbreaks, should also be taken into account.[97]

An application of the abovementioned epidemiological considerations and control measures can only be explored with the necessary nuance if FMD is viewed as one of the most important transboundary animal diseases in the world today, with all the practical and political implications of that status. Transboundary animal disease is defined by the Food and Agriculture Organisation (FAO) of the United Nations as:[98]

> Those that are of significant economic, trade and/or food security importance for a considerable number of countries; which can easily spread to other countries and reach epidemic proportions; and where control/management, including exclusion, requires cooperation between several countries.

The international presence of FMDV, the rapid spread of FMD, and the history of FMD at the forefront of animal disease research have led to the unequivocal classification of the disease as a transboundary animal disease.

The nature of transboundary diseases has shaped the way in which animal disease control is approached worldwide. FMD is regarded as one of the most impactful transboundary animal diseases worldwide by international bodies such as the FAO and the OIE.[99] The scale of control measures instituted by international movements and organisations is immense. The global foot-and-mouth disease control strategy jointly released by the OIE and FAO[100] describes FMD endemic countries, mostly developing countries, as threats to free countries and consequently aims to 'improve FMD control in regions where the disease is still endemic, thereby protecting the advanced animal disease control status in other regions of the world'.[101] This is set against a backdrop of the Progressive Control Pathway for the control of foot-and-mouth disease (PCP-FMD)[102] which aims to

96 TJD Knight-Jones et al 'Foot-and-mouth Disease Impact on Smallholders: What we know, what we don't know and how can we find out more?' (2017) 64 *Transboundary and Emerging Animal Diseases* at 1081.

97 Lazarus et al (n 36) 12.

98 MJ Otte et al 'Transboundary Animal Diseases: Assessment of socio-economic impacts and institutional responses' (2004) 9 *Livestock Policy Discussion Paper* at 6.

99 Otte et al (n 98) 7.

100 OIE & FAO 'The Global Foot and Mouth Disease Control Strategy' July 2012 https://www.oie.int/doc/ged/D11886.PDF (accessed 11 May 2021) at 2 (Global FMD Control Strategy).

101 Global FMD Control Strategy (n 100) 5.

102 OIE & FAO 'The Progressive Control Pathway for FMD Control' compiled by OIE and FAO 2008 http://www.fao.org/eufmd/global-situation/pcp-fmd/en/ (accessed 12 May 2021) at 8 (The Progressive Control Pathway for FMD Control).

eventually achieve an FMD free status in all endemic countries. Thus, the effect of academic, Eurocentric goals for disease control have far-reaching effects in many countries. Attaining a geographically free status throughout South Africa would, for example, require the culling of all endemic African buffalo or preventing any proximity between buffalo and livestock nationwide to eradicate a disease that only shows symptoms in 3.3% of animals all the while alternative control approaches exist which prevent the negative socio-economic impact of this small percentage of animals. When considering the implementation of control measures in South Africa, international guidelines and action plans are often complied with notwithstanding the fact that many local variables, such as stakeholder and host dynamics, have a significant effect on the efficacy and environmental, economic, and human impact of proposed guidelines.[103] The decisions made on the level of the VPN, as described above, should, therefore, not be taken up lightly and it is the analysis of the nature of these decisions that begs the question of whether these decisions constitute administrative action.

## 5 FMD movement control and communal subsistence farming

A large proportion of South Africa's economically active population is employed in the agricultural sector, of which most workers are small-scale subsistence farmers on communal land.[104] Also known as smallholder pastoralists, these farmers often maintain large herds of cattle but are economically vulnerable.[105] They are classified by their production goals and free-ranging nature rather than the number of cattle they own.[106] This section aims to evaluate the impact of FMD regulations on communal subsistence farming communities in South Africa not because they are the only stakeholders to be considered in regulatory decisions, but because these stakeholder impacts are often overlooked.

To illustrate the relevance of the question as to whether PAJA is applicable, focus will be placed on the direct external legal effects of FMD regulations on the rights of communal subsistence farmers who own the majority of cattle in FMD infected zones.[107] Decisions made regarding the regulation of FMD in South Africa have been largely

103 A Mcleod & J Leslie 'Socio-economic Impacts of Freedom from Livestock Disease and Export Promotion in Developing Countries' (2000) 3 *Livestock Policy Discussion Paper* at 17.
104 GR Thomson 'Overview of foot and mouth disease in southern Africa' (1995) 14(3) *Revue scientifique et technique* at 510.
105 Knight-Jones et al (n 96) 1081.
106 Knight-Jones et al (n 96) 1083.
107 Lazarus et al (n 36) 5.

based on international recommendations and generic action plans set out by bodies such as the World Trade Organisation, Food and Agriculture Organisation of the UN, and the OIE. It is critical for South African decision-makers to be informed and considerate of not only scientific factors, but also the social and economic factors unique to the situation in South Africa. The right questions can be asked if decisions are measured by their benefits weighed against their impact on the rights of all affected parties. These considerations will be applied by the authors to illustrate the complexity of regulatory decision-making regarding FMD by focusing on regulation 20(7) and the movement restrictions on live cattle.

It is important to understand the composition and nature of the South African agricultural sector as the context to which regulatory decisions are to be made. In a country where most cattle are kept extensively on communal lands, there also exists a large commercial farming industry with high productivity in intensive operations.[108] The industry is not simply one of optimisation and profit, but a deeply divided sector with deep-seated differences. The FMD endemic regions in South Africa mainly consist of the communal farming areas surrounding national parks.[109]

The external effects of FMD regulations and the costs of FMD outbreaks in developed countries are well understood.[110] Large-scale outbreaks of highly virile European FMD strains cause immense financial ruin in highly intensive commercial farming systems. These costs and trade barriers justify expensive and invasive FMD control measures.[111] An understanding of similar parameters in communal subsistence farming is, on the other hand, lacking. Oversimplification is common in the determination of the benefits of FMD control by omitting thorough analysis on the efficacy and impact of regulations.[112]

A 1995 review of FMD in South Africa[113] highlights that the effect of FMD outbreaks on rural small-scale farmers is limited, which is relevant when analysing the proportionality of regulations. This is not only due to the decreased pathogenicity of SAT strains, resilient indigenous cattle, and low incidence, but also due to their production goals.[114] Where intensive systems rely on a short time to finishing weight, subsistence farming systems often keep livestock in their flocks for extended periods and only trade as a source of additional or

108 Thompson (n 104) 511.
109 Knight-Jones et al (n 96) 1081.
110 Knight-Jones & Rushton (n 26) 162.
111 As above.
112 TJD Knight-Jones et al 'Randomised field trial to evaluate serological response after foot-and- mouth disease vaccination in Turkey' (2015) 33 *Vaccine* at 807.
113 Thomson (n 104) 511.
114 As above.

replacement income.[115] Subsistence farmers are also held back by unrelated, more invasive barriers to productivity such as poor sources of grazing and limited knowledge of management practices. Therefore, the decreased feed conversion associated with FMD outbreaks has little effect on the livelihoods of subsistence farmers. In other words, where productivity and efficiency are high, the impact of an FMD outbreak is great, but where productivity is already low, FMD has a less dramatic impact.[116] Although productivity might sound like an end goal for every farmer, these end goals cannot be imposed on communal farmers that have been accustomed to a certain way of life for generations. It is important to treat subsistence farming as a separate model and not as a failed attempt at commercial farming as many international bodies and policies do. If only monetary factors are considered, the central role played by cattle in these communities is overlooked.[117] These farmers do not only keep cattle for meat production and sale, but also for ceremonies, dowries, and as draught animals.[118] This is often seen as a barrier to the enforcement of current regulations as it is difficult to convince these farmers that their animals must be culled or contained to serve a purpose inconsistent with their way of life.[119] The commercialisation of subsistence farming by attempting to improve the productivity of subsistence farmers is not only patronising but also ineffective.

Thus, not only is the necessity of FMD control measures called into question, but numerous adverse effects can also be observed. Movement restrictions have multiple direct and indirect effects on the lives of communal subsistence farmers who make up the majority of cattle owners in FMD infected zones.[120]

Restricting the movement of live animals and meat products is integral in the zonal approach to FMD regulation. The maintenance of the OIE endorsed status of 'FMD-free with infected zones' is the main objective of this approach as it is trade-oriented and aimed at protecting the commercial farming areas from infected buffalo as disease reservoirs.[121] These commercial areas coincide with FMD free zones where the unrestricted trade and movement of cattle is allowed. Export of cattle from these areas and lucrative markets are enabled by the free status of the country as a whole.[122] The FMD infected zones, on the other hand, are subjected to stringent

115 Knight-Jones et al (n 96) 1804.
116 BG Bayissa et al 'Study on seroprevalence, risk factors, and economic impact of foot- and-mouth disease in Borena pastoral and agro-pastoral system, southern Ethiopia' (2011) 43 *Trop. Anim. Health Prod.* at 765.
117 Thomson (n 104) 511.
118 W Vosloo et al 'Foot and mouth disease: The experience of South Africa' (2003) 21(3) *Rev. sci. tech. Off. int. Epiz.* at 760.
119 Vosloo (n <XREF>) 760.
120 Jori et al (n 74) 920.
121 Knight-Jones & Rushton (n 26) 164.
122 Knight-Jones & Rushton (n 26) 166.

movement restrictions to prevent FMD from spreading to adjacent protection zones and subsequently to free zones. Even in the event that a herd is FMD negative and proven to have been isolated from buffalo, farmers in an infected zone are unable to move live animals to an FMD free zone. When moving animals to adjacent protection zones with or without vaccination, Red Cross permits are required, and expensive surveillance protocols must be complied with.[123] Criteria such as clinical examinations, vaccination of the entire herd, and written approval of provincial executive officers can be seen as effective barriers to any sale of cattle outside of the infected zone.

The adverse effects of the movement restrictions can only be appreciated when looking at their direct effect. Movement restrictions affect the ability of communal farmers to graze, trade, and practise cultural traditions.

Traditional extensive grazing patterns are disrupted by drawing arbitrary lines in communal farming areas. Extensive or pastoralist farming practices rely on the utilisation of large areas, often in biomes of lower carrying capacity, in order to maintain herds without supplementary feeding.[124] If the movement of these herds is restricted, the model is no longer sustainable and the use of these cattle as stores of wealth and replacement income in trying times becomes impossible. Communal cultural practices involving cattle are also significantly affected by movement restrictions. Large livestock herds and trading livestock play an integral role in many Southern African cultures.[125] Customary celebrations, rituals, and spiritual processes are impeded by the inability of farmers to move cattle to areas where celebrations are taking place or are traditionally held.[126]

Finally, the severe financial impact of movement restrictions severely affects the value of cattle as assets and income replacements for communal subsistence farmers. There is a substantial difference in the market price of cattle within and outside of the infected zone.[127] Movement restrictions prevent smallholder access to lucrative markets. This has been discussed in detail by researchers as a threat to the efficiency of current control methods because the price disparities have incentivised illegal movement and the trade of animals in higher-paying free zone markets.[128] This only serves to illustrate the perspective from which regulatory objectives are set. These objectives set by public functionaries should therefore

123 VPN (n 58) Art 5.1.2.3(a)(iii).
124 JC Barret 'The economic role of cattle in communal farming systems in Zimbabwe' (1991) 61 *Zimbabwean Veterinary Journal* at 7.
125 JP Danckwerts *A socio-economic study of veld management in the tribal areas of Victoria Province Department of Agriculture* (1974) at 33.
126 Danckwerts (n 125) 34.
127 Vosloo et al (n 118) 754.
128 Jori et al (n 74) 926.

be weighed up more carefully against the adverse financial effects that are presented to smallholders.

The broader dissonance in FMD regulation-making becomes apparent through the discussion of the impact of movement restrictions. Currently, decision-making has weighed up the trade and export benefits of commercial farmers against the costs of regulating communal areas. On a monetary level, this makes sense but this utilitarian view of some stakeholders as assets and others as liabilities is in dire need of re-evaluation. Given the deeply divided and unequal nature of the South African agricultural sector, economic factors prioritised by the FAO and WTO should not be the main grounds for decision-making without weighing up the costs of these regulations against the lack of benefits experienced by communal subsistence farmers. It is critical for South African decision-makers to be informed and considerate of not only the scientific and macro-economic factors, but also the social and economic factors unique to the situation in South Africa.

# 6 FMD control measures and administrative law

In this section, the current FMD control measures will be evaluated to determine the applicability of administrative law. This will be done by setting out the importance of 'administrative action' in terms of the Promotion of Administrative Justice Act[129] (PAJA), with particular focus on whether regulations and policy development can be regarded as administrative action. This will be considered with reference to the Regulations of the ADA, and the VPN to evaluate the appropriateness of holding them to the standards set in administrative law.

## 6.1 Administrative action in South Africa.

The current scheme of South African administrative law is founded on the PAJA, a piece of legislation mandated by the Constitution to encompass the right to administrative action that is lawful, reasonable, and procedurally fair.[130] The application of PAJA, confined to 'administrative action', has been a contentious point of litigation. There are two discernible reasons for this. First, the definitional requirements of 'administrative action' are an onerous exercise for litigants to prove.[131] Second, state actors are held to a higher standard under PAJA than under the principle of legality which provides the grounds of review for any exercise of public power or

129 PAJA (n 2).
130 Constitution of the Republic of South Africa, 1996 (Constitution) sec 33.
131 G Quinot & P Maree 'Administrative Action' in G Quinot (ed) *Administrative Justice in South Africa: An Introduction* (2020) at 79.

performance of a public function not covered by PAJA[132] This contention has been furthered by the courts. In the case of *Albutt v Centre for the Study of Violence and Reconciliation*,[133] the Constitutional Court seemingly supported the idea that one could choose between PAJA or legality when reviewing administrative action.[134] This has been held by some to be a grievous side-stepping of constitutionally mandated legislation and a violation of the separation of powers as well as the principle of subsidiarity.[135] The Constitutional Court has subsequently reaffirmed the proper sequence of enquiry in that a court must first investigate whether PAJA applies to an applicable case.[136] Although a perhaps uncomfortable fact for the modern administrative-legal practitioner, PAJA remains the mandated avenue for the review of administrative action.[137]

Before an assessment is made on whether PAJA applies to the development of the Regulations and the VPN, it is important to set out the implications of such findings. As discussed above, PAJA provides different grounds of review than does the principle of legality, and according to certain scholars, it also provides a more onerous standard for government action than does the principle of legality. PAJA requires, firstly, a host of procedural fairness requirements set out in sections 3 and 4 thereof.[138] Although some elements of procedural fairness have been incorporated in the legality principle, they are nowhere near as comprehensive.[139] Secondly, the legality principle requires a less strict interpretation of rationality (included under the 'reasonableness' requirement of PAJA).[140] Finally, the reasonableness envisioned by section 33 of the Constitution, and encapsulated by PAJA, demands not only rationality, but also

132 *Minister of Defense and Military Veterans v Motau and Others* 2014 (5) SA 69 (CC) (*Motau*) para 27.
133 2010 (3) SA 291 (CC).
134 *Albutt* (n 133) para 81.
135 M Murcott & W van der Westhuizen 'The ebb and flow of application of the principle of subsidiarity — Critical reflections on *Motau* and *My Vote Counts*' (2015) 7 *Constitutional Court Review* at 54; C Hoexter *Administrative Law in South Africa* (2012) at 131.
136 *Minister of Health and Another NO v New Clicks South Africa (Pty) Ltd and Others* 2006 (1) BCLR 1 (CC) para 99; *My Vote Counts NPC v Speaker of the National Assembly and Others* 2016 (1) SA 132 (CC) (*New Clicks*) para 183. In *My Vote Counts*, the legislation concerned was the Promotion of Access to Information Act 2 of 2000 (PAIA). The Court, however, drew numerous comparisons with PAJA (see, for example, para 148) when discussing the principle of subsidiarity and the importance of its application. See also *Motau* (n 132) para 27.
137 Hoexter (n 135) 42.
138 PAJA (n 2) secs 2-4.
139 M Murcott 'Procedural Fairness' in G Quinot (ed) *Administrative Justice in South Africa: An Introduction* (2020) at 195-196.
140 PAJA (n 2) sec 6(2)(f)(ii); *Minister of Defense and Another v Xulu* 2018 (6) SA 460 (SCA) para 50.

proportionality.[141] This is not a ground of review under the legality principle.

However, it is not PAJA's alleged onerous standards that determine whether administrative action should be reviewed in terms thereof, but rather the principle of subsidiarity and the separation of powers. The first point of call for a court is to investigate whether PAJA is applicable. If it does, it must thereafter be utilised.

The threshold for the use of PAJA is the definition of 'administrative action' contained in section 1(i) thereof.[142] Only when the definitional requirements have been met will PAJA be applicable. The requirements, as crystalised in *Motau,* are '(a) a decision of an administrative nature; (b) by an organ of state or a natural or juristic person; (c) exercising a public power or performing a public function; (d) in terms of any legislation or an empowering provision; (e) that adversely affects rights; (f) that has a direct, external legal effect; and (g) that does not fall under any of the listed exclusions'.[143]

It is, however, a first requirement that a decision of an administrative nature must be present and this has given rise to the most complicated legal questions in the current instance. Furthermore the requirements of 'adverse effect on rights' and 'direct legal effect' will also be discussed. The other elements of the definition do not pose significant obstacles in the current case and will only be fleetingly touched on.

The first requirement contains two elements. First, a 'decision' must be present, which is defined in section 1(v) as:[144]

> [A]ny decision of an administrative nature made, proposed to be made, or required to be made, as the case may be, under an empowering provision …

It is confounding that the definition of a decision both includes the terms 'decision' and 'of an administrative nature'. Some principles have, however, emerged from the courts as to what constitutes a decision. A decision must not be of an 'automatic' nature or happen

141 C Plasket 'Disproportionality — the hidden ground of review: *Medirite (Pty) Ltd v South African Pharmacy Council & Another*' (2019) 136(1) *South African Law Journal* at 26.

142 Quinot & Maree (n 131) 79.

143 *Motau* (n 132) para 33. This definition is the main reason why legal professionals are reluctant to utilise PAJA, as discussed below, and has been described in *Grey's Marine Hout Bay (Pty) Ltd and Others v Minister of Public Works and Others* 2005 (6) SA 313 (SCA) (*Grey's Marine Hout Bay)* as a 'palisade of qualifications'.

144 PAJA (n 2) sec 1(v).

solely through the working of the law or legislation.[145] A decision must also communicate a certain level of finality.[146]

### 6.2 Subordinate legislation and administrative action

The second definitional requirement of an administrative action is that the decision must be of an 'administrative nature'. Central to the investigation of what an administrative nature entails is the principle of the separation of powers.[147]

It remains contentious in South African administrative law whether enacting subordinate legislation (or 'legislative administrative action' as it is referred to by Chaskalson CJ in *New Clicks*)[148] amounts to administrative action in terms of PAJA. Subordinate legislation such as the Regulations are, of course, already a hybrid form of state power, being an essentially legislative function exercised by the executive branch. As administrative action already substantively engages with the meaning of the separation of powers, it is not surprising that controversy surrounds the issue of whether subordinate legislation is reviewable under PAJA.

Unfortunately, our courts have not been forthcoming with an answer. The seminal case concerning regulations and PAJA, *Minister of Health and Another NO v New Clicks South Africa (Pty) Ltd*, did not provide a conclusive majority opinion on this issue.[149] In order to ascertain whether the Regulations are governed by PAJA, it will be necessary to analyse the arguments given by Chaskalson CJ, and the other judges in *New Clicks*, as well as a few subsequent cases that have commented on their judgments.

The case of *New Clicks* concerned the regulations promulgated by the Minister of Health to introduce a 'transparent pricing system for medicines and Scheduled substances'.[150] The decision is of extreme length and contains eight different judgments, concurring and dissenting on different points. Chaskalson CJ sets out the main argument in favour of PAJA being applicable to the development of regulations. He points out that such delegated legislation was subject to judicial review in certain regards before the advent of the constitutional dispensation.[151] He then founds his argument firstly in

145 *Phenithi v Minister of Eduaction and Others* 2008 (1) SA 420 (SCA) paras 9-10.
146 Quinot & Maree (n 131) 82. The authors point out that the finality requirement is not absolute. An in-depth discussion thereof is however irrelevant to the current investigation.
147 *Minister of Home Affairs and Others v Scalabrini Centre, Cape Town and Others* 2013 (6) SA 421 (SCA).
148 *New Clicks* (n 136) para 118.
149 *New Clicks* (n 136) para 13.
150 *New Clicks* (n 136) para 23.
151 *New Clicks* (n 136) paras 102-109.

section 33(1) of the Constitution.[152] He expounds on the principles of an open and transparent government and adopts a purposive interpretation of section 33 of the Constitution in establishing a unified and overarching system of administrative review, as confirmed in the *Bato Star Fishing (Pty) Ltd v Minister of Environmental Affairs*[153] case.[154] He concludes that 'administrative action' as contained in section 33 of the Constitution does encompass delegated legislation. He then turns to the definition in PAJA, investigates the exclusions set out in sections 1(i)(aa) and (bb), and points to the fact that the section in the Constitution referring to the implementation of legislation by the President and his Cabinet is deliberately left out (excluded from the exclusions). [155]This, together with the meaning of administrative action under the Constitution, leads Chaskalson CJ to, correctly in the authors' opinion, conclude that enacting delegated legislation, including regulations, is, in fact, administrative in nature. This conclusion is supported by the judgment of O'Regan J.[156] Ncgobo J argues separately that it is unnecessary to conclude whether all regulations are administrative in nature but finds the regulations *in casu* to, in any case, be administrative in nature. His stance is supported by the judgments of Van der Westhuizen and Langa JJ.[157] O'Regan J rightly points out that Ncgobo J agrees with Chaskalson CJ's reasoning and that his own arguments also underscore the administrative nature of regulation-making.[158]

The arguments put forth by Chaskalson CJ are not only legally persuasive but embody a particularly appealing view of administrative law under the Constitution. It is unfortunate that four of the remaining judges chose not to engage with the question of whether delegated legislation was of an administrative nature or not. The final judgment, that of Sachs J, argues in favour of delegated legislation not being administrative in nature.[159] This argument, in the authors' opinion, significantly narrows the purview and purpose of PAJA to an extent not envisioned by section 33 of the Constitution.

Two Supreme Court of Appeal cases followed *New Clicks* and are worth mention. In the case of *City of Tshwane Metropolitan*

152 *New Clicks* (n 136) para 100. In *Motau*, (n 132) at 35, it was held that Chaskalson CJ's approach is correct insofar as the definition of administrative action must be construed consistently with constitutional rights.
153 2004 (4) SA 490 (CC) (*Bato Star Fishing*) para 22.
154 *New Clicks* (n 136) paras 110-118. See also *Fedsure Life Assurance Ltd and Others v Greater Johannesburg Transitional Metropolitan Council and Others* 1999 (1) SA 374 (CC), where the Court confirmed the possibility of delegated legislation being classified as administrative in nature.
155 *New Clicks* (n 136) paras 122-126.
156 *New Clicks* (n 136) paras 135 & 849.
157 *New Clicks* (n 136) paras 480, 843, & 851.
158 *New Clicks* (n 136) para 849.
159 *New Clicks* (n 136) para 610.

*Municipality v Cable City (Pty) Ltd*,[160] the Court endorsed the view of Chaskalson CJ and found that regulation-making by a Minister is administrative in nature and governable by PAJA.[161] However, the case of *Mostert NO v Registrar of Pension Funds and Others*[162] correctly pointed out that Chaskalson CJ's judgment was not authoritative in that regard. The Court, however, incorrectly held that the judgment was also only a comment on the particular regulations considered in *New Clicks*.[163] Respectfully, this view is mistaken. Chaskalson CJ makes a clear case on the administrative nature of all regulation-making based, *inter alia*, on the principles of transparency and justifiability as well as the construction and purpose of PAJA, as discussed above. The Court in *Mostert* also mentioned, although not conclusively, that the regulation-making power would be hampered by administrative review under PAJA.[164] This factor was also considered in Chaskalson CJ's argument but found not to outweigh the considerations of section 33(2) through which the Constitution gives Parliament an instrument to address these concerns.[165] In this regard, it is important to remember that the purposive application of PAJA endorses not only a constitutional mandate, but also underscores the legislature's significant position in the separation of powers.[166]

Whether policy-making constitutes administrative action is a less contentious question in our administrative law. Policy is often seen as belonging squarely with the executive branch in the exercise of executive power. However, it is important to understand that our courts have drawn a distinction between policy in a broad sense and policy in a narrow sense.[167] Policy in a broad sense relates to political decisions by the executive and is not subject to administrative law.[168] Policy that is formulated in the implementation of legislation may, however, constitute administrative action, and the stricter the constraints of the legislation, the more likely that the decision is administrative in nature.[169]

The guidance that the Court has given concerning policy can be instructive when investigating the administrative nature of other decisions, including regulations. In the case of *Motau*, the Court held that instrumental to the enquiry into administrative nature is whether

160 2010 (3) SA 589 (SCA) (*City of Tshwane*).
161 *City of Tshwane* (n 160) para 10.
162 (986/2016) ZASCA 108 (*Mostert*).
163 *Mostert* (n 162) para 10.
164 As above.
165 *New Clicks* (n 136) paras 115-117.
166 Murcott & van der Westhuizen (n 135) 54.
167 *Permanent Secretary, Department of Education and Welfare, Eastern Cape and Another v Ed-U-College (PE) Section21) Inc.* 2001 (2) SA 1 (CC) (*Ed-U-College*) para 18.
168 As above.
169 *Ed-U-College* (n 167) paras 18 & 21.

the decision is more closely related to policy (here in the broad sense) or to the implementation of legislation (which includes policy in the narrow sense).[170] Ancillary hereto is the source of the power and the discretion awarded to the decision-maker. Critically, the courts must consider the appropriateness of holding the specific decision to the higher standard set by PAJA.[171]

### 6.3 Are the FMD control measures subject to PAJA?

The Regulations enacted in terms of the ADA and the Veterinary Procedural Notice are considered under this section. The exact hierarchy of the authority and workings of both were discussed above[172] and now the administrative law guidelines that have now been illuminated must be applied.

Does the nature of the Regulations and the VPN correspond to policy in a broad sense or rather to the implementation of legislation? The Regulations are enacted in terms of section 31 of the ADA. They do not constitute political decisions but are closely confined to the implementation of specific provisions of the ADA itself. The control measures concerning foot-and-mouth disease are set out in accordance with section 9 and in furtherance of the goal of the ADA as a whole. Regarding the VPN, Article A.4.1 confirms that the sole purpose and application of the VPN is mandated by the ADA. Both the Regulations and the VPN are much closer to the implementation of legislation (or policy in a narrow sense) than to a broad sense of policy.

What are the sources of power? The Minister derives their power to make the Regulations directly from legislation, specifically from section 31 of the ADA. The source of the Director's power in formulating the VPN was expounded upon above, with the result that it derives both indirectly from the ADA through the Regulations, and where parts thereof are encapsulated by the Regulations, directly from the ADA.

What discretion is granted to the decision-maker? Here the Minister and the Director have some broad discretions in formulating a particular response to the spread of FMD. This discretion is, however, qualified significantly. The purpose of the control measures does not allow for discretion in that they must combat the spread of FMD. This is important since it constitutes what is essentially a scientific goal. Where discretion is granted, it relates to the most effective measures to be taken against a disease.

170 *Motau* (n 132) para 40.
171 As above.
172 See section 3 of this article.

Is it appropriate to view these decisions as administrative in nature given the more rigorous standard of PAJA? Given the sizeable impact that FMD measures may have on the lives and livelihoods of persons who do not enjoy strong economic bargaining power (such as communal farmers), the standards of procedural fairness seem especially necessary. This possibly destructive impact on subsistence living caused by arbitrary and disproportionate measures, balanced against the relative safety of rationally formulated alternative control measures, also weigh heavily in favour of holding the Regulations as well as the VPN to the standard of proportionality, as required by PAJA.

These factors all indicate, in varying degrees, that both the Regulations and the VPN constitute decisions of an administrative nature. The other requirements of section 1(i) of PAJA may be quickly addressed. The FMD control measures are affected by organs of state exercising public power in terms of legislation, as discussed in detail above.

When considering the requirement that such action must 'adversely affect rights', a broad interpretation is in order.[173] The Constitutional Court in *Joseph* held that the 'rights' of section 3(1) of PAJA should not be strictly defined to only encompass private law rights, but must also extend to constitutional and statutory rights owed to rights-bearers by the state.[174] The Court in *Grey's Marine Hout Bay* clarified the adverse effect as being a direct and immediate impact on said rights.[175] It is sufficient to discuss the element of a 'direct, external legal effect' in tandem herewith. The Court in *Joseph* confirmed that this element adds little to the previous requirement, as any action that adversely affects rights will have a direct, external legal effect.[176]

As was shown above, the movement control measures set out in the VPN and the Regulations impact the lives and livelihoods of communal subsistence farmers in numerous ways. If pure private law rights are to be identified, the rights contained in ownership are clearly impacted since subsistence farmers are curtailed from moving and selling their property. If the wider definition of *Joseph* is accepted, one could also make the argument that their right to occupational freedom, as contained in section 22 of the Constitution, is adversely affected. Currie and de Waal note that the section 22 right extends to the 'freedom to be occupationally active and to pursue a livelihood'.[177] Furthermore, the constitutional rights to

173 *Joseph and Others v City of Johannesburg and Others* 2010 (4) SA 55 (CC) (*Joseph*).
174 *Joseph* (n 173) para 43.
175 *Grey's Marine Hout Bay* (n 143) para 23.
176 *Joseph* (n 173) para 27; *Grey Marines Hout Bay* (n 143) para 23.
177 I Currie & J de Waal *The Bill of Rights Handbook* (2013) at 466.

culture and the enjoyment of cultural practices are adversely impacted, as was shown above.[178]

The exclusions relating to the exercise of executive powers were discussed above with regard to the *New Clicks* case and do not apply. The same can be said for any other exclusions set out in section 1(i)(b). It can then be confidently concluded that the FMD control measures set out in both the Regulations to the ADA and the VPN do constitute administrative action reviewable under PAJA.

### 6.4 (Dis)proportionality as a ground of review

It is accepted that under PAJA, administrative action is reviewable on the three main grounds set out in section 33 of the Constitution namely; lawfulness, reasonableness, and procedural fairness. These grounds are not set out separately and explicitly in PAJA, but are made up of a web of different but interrelated grounds of review. The focus of this study specifically concerns reasonableness, and more specifically, proportionality.

Reasonableness is highlighted by Corder to comprise of two different standards against which administrative action can be measured with the first being rationality and the second being proportionality.[179] The inclusion of these grounds of review in PAJA is, however, not as clear-cut. Reasonableness in general is included in section 6(2)(h) of PAJA under which public power or functions that 'are so unreasonable that no reasonable person could have exercised [them]' are reviewable.

Rationality, one of Corder's components of reasonableness, is, however, separately included in PAJA. Before PAJA, it was an established principle of administrative law under legality that administrative action that was irrational could be reviewed by the courts.[180] Rationality as a ground of review was codified by PAJA in section 6(2)(f)(ii), which sets out that administrative action is reviewable if:

> … not rationally connected to —
> (aa) the purpose for which it was taken;
> (bb) the purpose of the empowering provision;
> (cc) the information before the administrator; or
> (dd) the reasons given for it by the administrator.

178 Constitution (n 130) secs 30-31.
179 H Corder 'Without deference, with respect: A response to Justice O'Regan' (2004) 121 *South African Law Journal* at 443.
180 M Kidd 'Reasonableness' in G Quinot (ed) *Administrative Justice in South Africa: An Introduction* (2020) at 210; *Democratic Alliance v President of Republic of South Africa and Others* 2013 (1) SA 248 (CC) para 34.

The Supreme Court of Appeal, in the *Xulu* case, has indicated that rationality under legality provides a narrower basis of review not synonymous with section 6(2)(f)(ii).[181]

Proportionality, as the second part of reasonableness, is less easily identified and delineated. Hoexter identifies three characteristics of proportional administrative action; namely that the action be necessary to achieve the stated goal (necessity), that adverse effects of the action do not outweigh the beneficial effects (balance), and whether the means decided on are suitable or appropriate in attaining the desired outcome (suitability).[182] It is trite to refer to the remark on disproportionality by Hoexter that one would not use a sledgehammer to crack a nut.[183]

Courts have, now and again, included the principles of proportionality under reasonableness pre-PAJA albeit in a limited fashion.[184] However, PAJA itself makes no mention of the reviewability of disproportionate action.[185] It is rather inferred from the inclusion of both sections 6(2)(h) and 6(2)(f)(ii). Plasket notes that if rationality is included explicitly in section 6(2)(f)(ii), then the unreasonableness of section 6(2)(h) must include more than simple irrationality.[186] Plasket also argues that proportionality can be included under section 6(2)(i), which provides for the reviewability of unconstitutional or unlawful action, as 'reasonableness' under section 33 of the Constitution encapsulates proportionality.[187]

The criteria for proportionality can be based on the final two factors set out in *Bato Star Fishing* are the 'nature of the competing interests involved' and 'the impact of the decision on the lives and well-being of those affected'.[188] A critical consideration at this stage, but which remains important throughout administrative review, is that courts show proper deference to the other branches of state (usually the executive branch).[189] This careful balance is essential in maintaining the separation of powers. De Ville makes the argument that proportionality should only be used as a ground of review in cases where fundamental rights are infringed upon, in order to ensure that courts do not undertake decision-making that is not constitutionally

181 *Minister of Defense and Another v Xulu* (337/2017) [2018] ZASCA 65 para 50.
182 Hoexter (n 135) 334.
183 As above.
184 Plasket (n 141) 21.
185 Plasket makes reference to the fact that some early drafts of PAJA by the South African Law Reform Commission did include disproportionality as ground of review, but that it was omitted from the final legislation. See Plasket (n 141) 25.
186 As above.
187 Plasket (n 141) 26.
188 *Bato Star Fishing* (n 153) para 45; Kidd (n 180) 212.
189 *Minister of Environmental Affairs and Tourism v Phambili Fisheries (Pty) Ltd*; *Minister of Environmental Affairs and Tourism and Others v Bato Star Fishing* (n 153).

sanctioned or where they are ill-equipped.[190] Kidd however argues that the nature of the right or interest must already be considered to determine whether administrative review is appropriate, as set out in *Bato Star Fishing*, thus providing a safeguard against judicial overreach.[191] Therefore, proportionality need not be confined only to administrative action that violates fundamental rights.

It is then the three characteristics of necessity, balance, and suitability that provide the measures of proportionality *in casu*. Necessity begs the question of whether the measure or action was necessary to achieve the desired end. De Ville adds that the enquiry includes whether no lesser form of interference with a person's right was possible.[192] It is prudent to discuss this requirement with the requirements of suitability, which require that the measure be appropriate and effective in achieving the desired outcome. We have discussed above that to treat the prevention of the spread of FMD itself as a black and white standard is to miss both the scientific complexity of the disease as well as the relatively low risk that the disease poses for communal subsistence farmers. Thus, while the movement control measures might be necessary or suitable when attempting to achieve international standards blindly imposed, the same cannot simply be accepted when considering South Africa's unique agricultural make-up, as well as the epidemiological aspects of FMD.

The element of balance is also critical in the current enquiry. De Ville characterises the enquiry into balance as to whether an excessive burden is placed on the individual that is *disproportionate* to the public interest at stake.[193] It is here that proportionality as a ground of review presents, in the authors' opinion, the most valuable contribution *in casu*. It is clear that on both ends of the balancing scale there are factors being missed. Communal subsistence farmers are adversely impacted in numerous ways by the movement controls which infringe upon their property rights, their rights to cultural practices, and their rights to trade and occupational freedom. It is these farmers who are first affected by the control measures, making up the majority of farmers in FMD infected zones. On the other hand, when considering the 'public interest at stake', there is a clear discrepancy between the control measures and the scientific dangers posed by FMD. Although the disease poses some risk, the epidemiological complexity requires a more nuanced approach than what is put in place by the movement control measures of the ADA Regulations and the VPN.

190 JR de Ville *Introduction to the Study of the Law of the Constitution* (1915) at 205-206.
191 Kidd (n 180) 217.
192 de Ville (n 190) 203.
193 de Ville (n 190) 206.

The exact balance is not easily determinable and, in any case, lies beyond the scope of a preliminary study such as this one. What is essential, however, is that proportionality, as part of reasonableness, requires a thorough investigation of the stakeholders at play, and a re-examination of the current legislative framework.

# 7 Conclusion

This article explored the administrative nature of FMD movement control measures in South Africa and measured them against the appropriate standard of proportionality under PAJA. The aetiological and epidemiological nature of the disease was used to illuminate the nuanced challenges in disease control. The legal entrenchment of FMD control in South Africa was set out and the specific movement control measures currently employed were critically explored. The characteristics of the disease, the efficacy and impact of current control measures, and the legal nature of the control measures were then measured against the current framework of administrative law. It is concluded that the current movement control measures, as contained in the Regulations and the VPN, can and should be subjected to the standards of PAJA. From this, the movement control measures were evaluated in light of the reasonableness requirement under PAJA, specifically looking at proportionality as a ground of review.

This article attempts to alleviate the dearth of legal research into the regulation of animal diseases. It represents a preliminary enquiry into the overlooked but important intersection between the legal and the epidemiological fields. The scope of the article is, by necessity, narrow but points to several lacunae in current legal-scientific discourse.