4.0 Veterinary Field Services BUDZATJA BUYABULALAII RABIES KILLS! BOKATI

4.1 Dip-tanks and Dipping Inspections

A dip-tank area is a disease control area in a communal or title deed land (TDL) area that may have definite boundaries e.g. a farm on TDL or not so distinct boundaries (an area on Swazi Nation Land-SNL) which defines the geographical confines of particular animals. The area is often associated with the presence of a physical structure (a dip-tank) where animals like cattle, goats and sheep are taken primarily for purposes of ectoparasite control. The physical location of the dip-tank structure has therefore become a very important point where Veterinary Assistants inspect cattle, sheep and goats. The structure can either be communal (public) i.e. constructed by government or government agencies in collaboration with communities, or private whereby the title deed holder of the farm area has total ownership of the structure.

4.1.1 Dip-tank Numbers

Table 10 below shows the numbers of dip-tanks in the country according to their various regions and categories.

Pagion	Tuno	Total		Plunge Dips			Spray Dips		
Region	Type	TOtal	Total Not in Use		In use	Total	Not in Use	In use	
	Public	136	136	0	136	0	0	0	
Hhohho	Private	22	7	0	7	15	3	12	
	Total	158	143 0 14		143	15	3	12	
	Public	110	110	1	109	0	0	0	
Lubombo	Private	156	64	37	27	92	27	65	
	Total	266	174	38 136		92	27	65	
	Public	141	141	0	141	0	0	0	
Manzini	Private	113	60	17	43	53	15	38	
	Total	254	201	17	184	53	15	38	
	Public	141	141	0	141	0	0 0		
Shiselweni	Private	56	21	3	18	35	4	31	
	Total	197	162	3	159	35	4	31	
	Public	528	528	7	521	0	0	0	
National	Private	347	152	57	95	195	49	146	
	Total	875	680	58	622	195	49	146	

Table 10: Numbers of dip-tanks in the country

As seen in table 10 above, there were 875 dip-tanks nationally as at 31st December 2012, of which 347 (40%) were in private ownership and 528 (60%) owned by the government (public dip-tanks). From the 875 dip-tanks, 680 (78%) are of the plunge type and 195 (22%) of the spray type. As at December 2012, there were a total of 762 dip-tanks in use and 113 that were not in use. This means of the 875 dip-tanks 87% were in use and 13% not in use. The highest numbers of dip-tanks were in Lubombo with 266 followed by Manzini with 254, Shiselweni 197 and Hhohho 158. Hhohho has the highest proportion of public dip-tanks as compared to private dip-tanks which comprise 86%, followed by Shiselweni with 72% public, Manzini with 56% and lastly Lubombo with 41%. In all regions there were no public owned dip-tanks which are of the spray type, meaning all public dip-tanks are of the plunge type.

4.1.2 Dipping and inspections

Cattle are required by law to be registered at dip tanks. Dip-tanks carry out dipping and inspections of livestock up to 40 times a year depending on agro-ecological zone and the FMD risk level of the dip-tank area. The average of registered cattle in the year was 651629 and the average dipped in the year was 607355. Approximately 93% animals were inspected and dipped in the year. Less than 1% (1957) of those dipped were strays (were dipped in dip tanks in which they are not registered). There were 443 cases in the year of failure to present stock for dipping. Lubombo had the highest number of cases with 179 followed by Hhohho 164, Manzini 61 and Shiselweni 39.

According to figure 6, the number dipped versus number registered was consistent throughout the year.

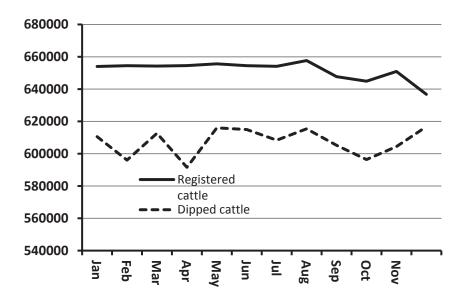


Figure 6: Dipping efficiency in the year 2012

4.1.3 Dip-tank Inspections

Dip-tank inspections are done by Assistant Animal Health Inspectors and Animal Health Inspectors in their respective areas of jurisdiction. It involves checking of dip-tank registers for accuracy i.e. records of animals permitted in and those permitted out and other register and dipping issues including dip-tank maintenance. The time line definition for this activity is the month since the targeted number of dip-tanks to be inspected is defined over a month period. Table 11 below shows numbers of inspections done on monthly basis as well as the targeted minimum number of dip-tanks to be inspected by each region monthly.

	Hhohho		Hhohho Lubombo			nzini	Shise	lweni	National Total		
Parameter	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	
No. of dip-tanks in use	136	19	107	92	135	81	141	51	519	243	
Average no. of diptanks inspected per month	8	1	13	4	7	4	8	2	36	11	
Total average no. of dip-tanks inspected per month	9		17		11		10		47		
Minimum no. of dip- tanks targeted to be inspected per month	2	24	32		28		28		112		

Table 11: Numbers of dip-tanks inspected on month basis

From Table 11 above it can be shown that generally only 4 to 12 percent of the total dip-tanks in use were inspected in each month during the course of the year. For management purposes each sub-region has a target of a minimum of 4 dip-tanks to inspect every month which depending on the number of sub-regions in each Region make the total number of dip-tanks in each region expected to be inspected (minimum), for e.g. Hhohho has 6 sub-regional offices and therefore a total of 24 dip-tanks are expected to be inspected in each month. The number of dip-tanks inspected in each region when compared with the monthly target shows that nationally 42% was inspected. If this is apportioned to each region, Hhohho inspected 38%, Lubombo 53%, Manzini 39% and Shiselweni 36%.

It should also be noted that dip-tank inspections are always competing with other activities like CA vaccinations (normally done February/March), ear tagging and branding (all months, more in winter months), stock census taking (August) as well as rabies vaccination (September).

4.1.3 Prosecutions in Sub-regional Offices

Veterinary Services as a Regulatory Authority for animal health issues is mainly guided by the Animal Disease Act of 1965 (and its amendments). This principal legislation covers a lot of issues on dipping and cleansing of stock, livestock movement, disease control and inoculation of stock, etc., which currently dominate the prosecutions. Other regulatory legislative frameworks include the Veterinary Public Health Act, the Livestock Identification Act 17/2013, the Cruelty to animals Act 1962, the Ponds Act 1966, all of which can be used by Veterinary Officials to prosecute offenders when in contravention or when the smooth course of carrying out their mandate is obstructed.

Most prosecutions are done by Animal Health Inspectors and Assistant Animal Health Inspectors at subregional stations who sign the charge sheet which is then taken to the police station for pressing of charges in accordance with the contravened law. Table 12 below shows the number of prosecutions done in the year, the number convicted and fines imposed on offenders.

	Year 2011	Year 2012
Total of No of cases	1,280	807
Total of No convicted	747	461
Total of No pending	608	356
Total of Fines (E)	E 63,020.00	E 51,870.00

Table 12: Number of prosecutions and fines collected in the year 2012

Table 12 shows that the most common Act under which prosecutions are done is the Animal Disease Act 7/1965 and its regulation. In order of frequency of the regulations, regulation 11 (dipping and cleansing of stock) and regulation 38 (authority required for movement of stock) are the most common. Others in this order are regulations 16 (inoculation of stock) and 42 (inspection and enumeration of stock). This means that livestock owners are commonly prosecuted for failing to present stock at dipping (regulation 11) and moving livestock without a valid permit (regulation 38).

4.1.4 Feedlot and Smallholder SNL Dairy Units

A feedlot is a holding where food producing animals are kept for fattening for a specified period, usually 90 days. Swaziland distinguishes a feedlot that is registered as a dip-tank as one which is normally on Title Deed Land and is a farm holding to one which is registered in a dip-tank as a kraal and normally is on Swazi Nation Land. Both these types of feedlots require registration by veterinary authorities whereby the TDL feedlots are coded F1, F2, etc..., whereas the smallholder SNL feedlots also called 'Small Scale Fattening Units' are coded FH_, FS_, FL_, FM_ with the letter after the 'F' representing the first letter of the region under which the feedlot (and dip-tank area) falls.

The SSFU are registered by regional veterinary authorities in a process that require exemption of the animals in that feedlot from attending dipping at a public dip-tank facility as required by law. This process requires collaboration between animal health and livestock production extension staff. The number of 'active' SSFUs is subject to change from year to year depending on farmer interest and prevailing economic situation.

Large dairy farms are handled in a similar manner as the large TDL feedlots and are also registered as diptanks whereas the Small Holder Dairy Units found on Swazi Nation Land are registered at the dip-tank as a kraal similar to the SSFU.

The table below shows the numbers of SSFUs and Small Scale Dairy Units registered at dip-tanks in the different regions as at December 2012.

Regions	Registered Small Scale Fattening Units as at Dec 2012	Registered Small Scale Dairy Units as at Dec 2012
Hhohho	16	216
Lubombo	39	52
Manzini	66	256
Shiselweni	11	80
Totals	132	604

Table 13: Number of Small Scale Fattening Units (SSFU) and Small Scale Dairy Units as at December 2012

4.1.5. Veterinary Clinical Work

The Veterinary Services Division of the Department operates various clinics from the capital cities of each of the four administrative regions as well as in Piggs Peak, and a diagnostic laboratory in Manzini. Each of these sections is headed by the a Government Veterinary Surgeon providing services that include small and large animal medicine and surgery, pregnancy diagnosis, diagnostic and post mortem services, issuing of import permits (I/P) and export health certification (H/C) amongst others. Some of these services like issuance of import permits, for specific products only, are available from Veterinary Services Head Office in Mbabane and some permits are issued from the Veterinary Public Health Division, Meat Hygiene Section, based in Manzini and also operating from Matsapha. Table 14 below illustrates itemised clinical activities and services provided to the public and revenue generated from the various divisions and sections.

Service	Services Provided To The Public												
Provider	Medical	Surgical	Obstetrics	Pregnancy Diagnosis	Euthanasia	Necropsy	I/P	H/C	Generated (E)				
HQ							21	0	200.00				
Hhohho	463	28	0	0	6	1	1,241	222	66,550.00				
Lubombo	124	1	2	0	0	7	223	44	21,614.00				
Manzini	382	10	8	3	0	10	1,118	117	64,720.00				
Shiselweni	352	33	5	153	3	30	1,537	33	56,799.50				
VPH							7,981	33	229,440.00				
Totals	1,321	72	15	156	9	48	12,121.00	449.00	439,323.50				

^{*}I/P; Import Permits issued and H/C; Health certificates issued

 Table 14: Clinical Activities and Services provided to the public

Table 14 shows that meat hygiene had the highest revenue generated followed by Hhohho Clinical Services, then Manzini, Shiselweni, Lubombo and lastly headquarters. The Meat Hygiene section regulates the health certification of imported raw food products of animal origin being milk, red meat, pork, fish and poultry. This section issues out import permits for these products and inspect such imports to ensure compliance with the import permit conditions of the country. Revenue generated is mainly from such import permits and inspections. Headquarters (HQs) charges for issuance of import permits and transit permits in the case of importation of wildlife as well as cattle for immediate slaughter. Such permits are only authorised for issuance by HQs.

HQ - Head Quarters; VPH - Veterinary Public Health (Meat Hygiene Section)

Clinical Work by Species

Table 15 and figure 7 show the number of cases by species and by region. The percentage of cases contributed by that particular species to the total number of cases for that region is included in the table. There were a total of 501 cases in Hhohho of which 81% were canine and 15% bovine. Lubombo is the only region which attended more bovine cases than canine with 55% bovine and 29% canine cases. Shiselweni had the highest number of total cases attended, of which 43% were bovine and 37% canine. Lubombo and Shiselweni had more bovine than canine cases, with Lubombo having 45% bovine and 29% canine cases. The highest number and proportion of porcine cases were seen in the Shiselweni region with 42/579 (7%). The highest proportion of caprine cases attended to were in Lubombo with 11% (15/132).

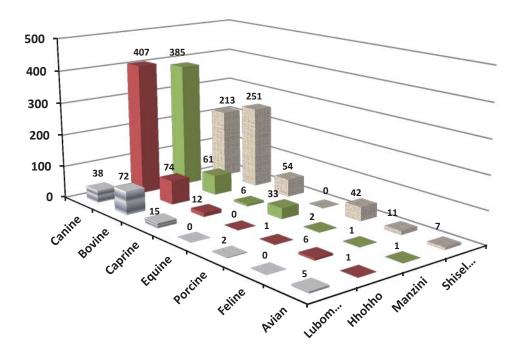


Figure 7: Illustration of the numbers of attended clinical cases by animal species and region

Region	Total	Car	nine Bovine		Caprine		Porcine		Equine		Feline		Avian		Ovine		
Hhohho	501	407	81%	74	15%	12	2%	1	0%	0	0%	6	1.2%	1	0%	0	0%
Lubombo	132	38	29%	72	55%	15	11%	2	2%	0	0%	0	0.0%	5	4%	0	0%
Manzini	490	385	79%	61	12%	6	1%	2	0%	33	7%	1	0.2%	1	0%	1	0%
Shiselweni	579	213	37%	251	43%	54	9%	42	7%	0	0%	11	1.9%	7	1%	1	0%
Total	1,702	1,0	043	4.	58	87		87 47		47 33		18		14		2	

Table 15: Numbers of attended clinical cases by animal species and region