

Table 1. Periodic regression analysis of Livestock disease outbreaks in India (2001-16)

No.	Disease	Parameters	Estimate	Standard Deviation	t value	p value	R value	R Squared value	Adjusted R Squared value
Bacterial diseases									
1	Anthrax	Intercept	9.849	0.701	14.05	<0.001	0.404991	0.16402	0.14784
		x	-0.026	0.006	-4.357	<0.001			
		c1	-1.295	0.411	-3.153	0.002			
		s1	0.392	0.419	0.936	0.351			
2	Black Quarter	Intercept	39.211	2.031	19.307	<0.001	0.538627	0.29012	0.27638
		x	-0.121	0.018	-6.862	<0.001			
		c1	3.293	1.228	2.682	0.008			
		s1	0.669	1.352	0.495	0.621			
3	Enterotoxaemia	Intercept	21.72	1.404	15.472	<0.001	0.553046	0.30586	0.29242
		x	-0.099	0.012	-8.178	<0.001			
		c1	-2.384	0.919	-2.595	0.01			
		s1	-1.087	0.953	-1.141	0.256			
4	Haemorrhagic Septicemia	Intercept	58.643	3.269	17.94	<0.001	0.568278	0.32294	0.30984
		x	-0.237	0.028	-8.428	<0.001			
		c1	0.958	2.009	0.477	0.634			
		s1	-0.578	2.101	-0.275	0.784			
Viral diseases									
5	Bluetongue	Intercept	4.133	0.891	4.637	<0.001	0.176557	0.03117	0.01242
		x	-0.015	0.008	-1.91	0.058			
		c1	-0.919	0.605	-1.519	0.131			
		s1	0.205	0.62	0.33	0.742			
6	Foot and Mouth Disease	Intercept	100.715	6.983	14.422	<0.001	0.458901	0.21059	0.19531
		x	-0.386	0.061	-6.382	<0.001			
		c1	-2.359	4.429	-0.533	0.595			
		s1	-0.844	4.625	-0.183	0.855			
7	Peste des petits ruminants	Intercept	29.925	1.985	15.074	<0.001	0.389743	0.1519	0.13538
		x	-0.084	0.017	-4.812	<0.001			
		c1	-4.429	1.321	-3.354	0.001			
		s1	1.472	1.301	1.132	0.26			
8	Sheep and Goat Pox	Intercept	2.066	0.715	2.889	0.004	0.564269	0.3184	0.3052
		x	0.045	0.007	6.829	<0.001			
		c1	3.337	0.52	6.424	<0.001			
		s1	1.442	0.527	2.739	0.007			
Parasitic diseases									
9	Babesiosis	Intercept	9.081	1.356	6.695	<0.001	0.437469	0.19138	0.17573
		x	-0.023	0.013	-1.719	0.088			
		c1	0.153	0.896	0.171	0.865			
		s1	5.282	1.016	5.197	<0.001			
10	Fasciolosis	Intercept	12.089	1.897	6.372	<0.001	0.530047	0.28095	0.26703
		x	-0.023	0.018	-1.288	0.2			
		c1	-2.437	1.263	-1.93	0.055			
		s1	9.711	1.343	7.23	<0.001			

11	Theileriosis	Intercept	6.977	0.845	8.262	<0.001	0.297641	0.08859	0.07095
		x	-0.015	0.008	-1.94	0.054			
		c1	0.245	0.547	0.448	0.655			
		s1	1.803	0.608	2.966	0.003			
12	Trypanosomosis	Intercept	30.396	7.067	4.301	<0.001	0.479979	0.23038	0.20188
		x	-0.16	0.049	-3.264	0.002			
		c1	-8.242	1.82	-4.528	<0.001			
		s1	2.536	1.18	2.149	0.035			