

## Appendix

### → T-Test

[DataSet0]

**One-Sample Statistics**

	N	Mean	Std. Deviation	Std. Error Mean
Feed	21	645668.6667	2151661.912	469531.1229
Initial feed	21	53202.0053	235424.0319	51373.73556
Employee	21	37.9524	19.99119	4.36243
Power	21	262.4762	153.61205	33.52090
Water	21	11.5714	7.54037	1.64544
Fuel	21	17.5714	28.05276	6.12161
land	21	4677.1429	2760.28466	602.34350

**One-Sample Test**

	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Feed	1.375	20	.184	645668.6667	-333756.0931	1625093.426
Initial feed	1.036	20	.313	53202.00529	-53961.7292	160365.7398
Employee	8.700	20	.000	37.95238	28.8525	47.0523
Power	7.830	20	.000	262.47619	192.5528	332.3996
Water	7.032	20	.000	11.57143	8.1391	15.0038
Fuel	2.870	20	.009	17.57143	4.8020	30.3409
land	7.765	20	.000	4677.14286	3420.6763	5933.6094

**Correlations**

		Feed	Initial feed	Employee	Power	Water	Fuel	land
Feed	Pearson Correlation	1	-.071	-.283	-.268	-.255	-.097	-.240
	Sig. (2-tailed)		.760	.213	.241	.265	.674	.295
	N	21	21	21	21	21	21	21
Initial feed	Pearson Correlation	-.071	1	-.099	-.229	.022	-.045	.111
	Sig. (2-tailed)	.760		.670	.319	.924	.846	.631
	N	21	21	21	21	21	21	21
Employee	Pearson Correlation	-.283	-.099	1	.295	.808**	.061	.557**
	Sig. (2-tailed)	.213	.670		.194	.000	.792	.009
	N	21	21	21	21	21	21	21
Power	Pearson Correlation	-.268	-.229	.295	1	.341	-.167	.356
	Sig. (2-tailed)	.241	.319	.194		.130	.468	.113
	N	21	21	21	21	21	21	21
Water	Pearson Correlation	-.255	.022	.808**	.341	1	.032	.835**
	Sig. (2-tailed)	.265	.924	.000	.130		.890	.000
	N	21	21	21	21	21	21	21
Fuel	Pearson Correlation	-.097	-.045	.061	-.167	.032	1	.088
	Sig. (2-tailed)	.674	.846	.792	.468	.890		.705
	N	21	21	21	21	21	21	21
land	Pearson Correlation	-.240	.111	.557**	.356	.835**	.088	1
	Sig. (2-tailed)	.295	.631	.009	.113	.000	.705	
	N	21	21	21	21	21	21	21

\*\* . Correlation is significant at the 0.01 level (2-tailed).

### Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The categories of Employee occur with equal probabilities.	One-Sample Chi-Square Test	.997	Retain the null hypothesis.
2	The categories of Power occur with equal probabilities.	One-Sample Chi-Square Test	1.000	Retain the null hypothesis.
3	The categories of Water occur with equal probabilities.	One-Sample Chi-Square Test	.883	Retain the null hypothesis.
4	The categories of Fuel occur with equal probabilities.	One-Sample Chi-Square Test	.647	Retain the null hypothesis.
5	The distribution of Feed is normal with mean 645,668.67 and standard deviation 2,151,661.91.	One-Sample Kolmogorov-Smirnov Test	.004	Reject the null hypothesis.
6	The distribution of Initial feed is normal with mean 53,202.01 and standard deviation 235,424.03.	One-Sample Kolmogorov-Smirnov Test	.000	Reject the null hypothesis.
7	The distribution of land is normal with mean 4,677.14 and standard deviation 2,760.28.	One-Sample Kolmogorov-Smirnov Test	.442	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

### Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distributions of Feed, Initial feed and land are the same.	Related-Samples Friedman's Two-Way Analysis of Variance by Ranks	.007	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

## Friedman Test

### Ranks

	Mean Rank
Feed	2.98
Initial feed	5.10
Employee	3.69
Power	4.81
Water	2.55
land	6.55
Fuel	2.33

### Test Statistics<sup>a</sup>

N	21
Chi-Square	64.859
df	6
Asymp. Sig.	.000

a. Friedman Test

## Friedman Test

### Ranks

	Mean Rank
Employees	2.88
Power	3.86
fuel	1.52
Water	1.74
land	5.00

### Test Statistics<sup>a</sup>

N	21
Chi-Square	71.914
df	4
Asymp. Sig.	.000

a. Friedman Test