

PERFORMANCE EVALUATION OF INDIAN KHADI AND VILLAGE INDUSTRIES

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ABSTRACT

Background

Khadi and Village industries is a statutory organization which has been set up by the Government of India by an Act of Parliament, Khadi and Village Industries Act 1956 for the promotion and development of Khadi and village industries by providing employment opportunities in rural area and there by strengthening the rural economy.

Materials and Methods

The study aims to analyse the performance of Indian Khadi and Village Industries. The scope of the study is limited to the performance evaluation of Indian Khadi and village industries. The study is based on the data collected from the annual report of MSME for the period 2006-2013. The data were suitably classified and analyzed based on the objective of the study. Analysis was done via statistical software SPSS 16.0. Trend percentage, average, one way ANOVA, coefficient of variation and trend analysis were used.

Results

The AAGR of production, sales and employment Khadi and Village Industries were 7.399 and 9.453, 7.220 and 6.909, 3.146 and 7.157 respectively during the period 2006 to 2013-14. CAGR

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for the same period was negative for production (-1.56) sales (-1.596) and cumulative employment

(-1.642). Sales in value decreased by .373 % with every increase in production in units. The quadratic model stated that the expected sales in value was equal to -3.966 squared production in units. Cumulative employment value was increased by .001% with every increase in production in units. Production in value was decreased by 37.290% with every increase in production in units.

Conclusion

Sales in value decreased by .373 % with every increase in production in units. The quadratic model stated that the expected sales in value was equal to -3.966 squared production in units. Cumulative employment value was increased by .001% with every increase in production in units. Production in value was decreased by 37.290% with every increase in production in units.

Key words: Khadi and Village Industries Commission, Average Annual Growth Rate, Cumulative Average Growth Rate and Khadi and Village Industries Commission.

Introduction

Khadi and village industries is a statutory organization set up by the Government of India by an Act of Parliament. It was established under the Khadi and Village industries Act 1956. It is engaged in the promotion and development of Khadi and village industries by providing employment opportunities in rural area and thereby strengthening the rural economy. For the proper development of this sector the Government of India constituted a National Level Organization in the name of Khadi and Village Industries Commission (KVIC). At present, there are 30 State KVIBs functioning all over India.

Review of Literature

Vasant (2005)¹ studied Role KVIC in promoting Rural industries. The result revealed that Khadi and other Village Industries promotion becomes crucial because "they not only generate

Employment in rural areas but contribute to the process of rural demand creation and capital formation as well" The current state of the economy shows rise in rural demand. it is expected that Khadi and other village industries will provide employment for up to 9 million people.

Theoretical study by Saif (2003)² proposed a role of KVIC in promoting rural industries. The study revealed the perceived benefits of there has been a significant rise in rural entrepreneurship, rise in rural literacy rates and increase in grant for rural development and villages and small industries, which is responsible for increase in rural entrepreneurship.

Jabarullaha and Rajeswari (2003)³ made a study on the Role of KVIC. The result revealed that KVI have a high potential of employment generation and income creation particularly in the rural and backward areas. Khadi and Village Industries have made a commendable performance in terms of employment, production, sales and earnings.

Significance of the study

Creating employment opportunities in rural area and there by strengthening the rural economy is the crux of Khadi and village industries. The initiative of the Government has largely contributed to the promotion of khadi products which are now renowned as a fashion symbol among the youth as well as other age groups of India. So, Khadi and Village Industries have an important and well established place in the Indian industries. The present study has been undertaken to analysis the performance of the Khadi and Village Industries which would help to know the progress achieved by this sector in recent years. In this context, the present study titled "Performance evaluation of Khadi and village industries" assumes greater significance.

Scope of the study

The scope of the study is limited to the performance evaluation of Indian Khadi and village industries. The study is based on the data collected from the annual report of Ministry of Small and Medium Enterprises.

Objective of the study

The main objective of the study is to analyze the performance of Indian khadi and village industries.

Hypothesis of the study

H₀₁ There is no significant difference in the mean growth of KVI units and other variables viz. sales in value, production in units, cumulative employment, production in value, cumulative employment number, sales in units.

Research Methodology

Collection of Data

Study is mainly based on secondary data collected from the annual report of MSME.

Tool of Analysis

The data collected were classified and analyzed based on the objective of the study. Analysis was done via statistical software SPSS 16.0. Trend percentage, AAGR, CAGR, one way ANOVA, coefficient of variation and trend analysis were used.

Period of Study

The study covered a period of 8 years i.e. from 2006 to 2013

Performance Evaluation of KVI – Analysis

The AAGR of production, sales and employment Khadi and Village Industries were 7.399 and 9.453, 7.220 and 6.909, 3.146 and 7.157 respectively during the period 2006 to 2013-14. CAGR for the same period was negative for production (-1.56) sales (-1.596) and cumulative employment (-1.642). The Linear model stated that the expected sales in value was equal to -626.495 to Production in units. The b1 value suggested that sales in value decreased by .373% with every increase in production in units. The quadratic model stated that the expected sales in value was equal to -3.966 squared production in units. The increased production in units would actually decrease sales in value more exactly in increased units in production past .119 will decrease with the expected sales in value. From this point, it appeared that the quadratic model better follows the shape of the data. (Table 1) In particular, the linear model seemed to overestimate production in units for cases with Khadi industries and underestimated sales in value for cases village industries (Fig.1). The One-Way ANOVA test was conducted to know whether there is any significant difference in the growth in the production units. It is revealed that

there is a significant difference in the growth in the production units and sale value, since the p value 0.000 is less than 0.05. The Linear model state that the expected cumulative employment (value) is equal to 38.02 to Production in units. The b1 value suggest that cumulative employment value increased by .001% with every increase in production in units. The quadratic model states that the expected cumulative employment (value) is equal to $89.437 \text{ squared production in units}$. The positive value for b2 means that past a certain point, the expected cumulative employment production past $.000/(2*1.268) = 0$ (Table 3).

The One-Way ANOVA test was conducted to know whether there is any significant difference in the cumulative employment value and production in units. The overall regression model statistically significantly predicts there is a significant difference in the growth in the cumulative employment value and production in units, since the p value is less than 0.05. The Linear model state that the expected production in value is equal to 32.049 to Production in units. The b1 value suggest that production in value decreases by 37.290% with every increase in production in units. The quadratic model states that the expected production in value is equal to $32.238 \text{ squared production in units}$. The negative value for b2 means that past a certain point, increased production in units would actually decrease production in value more exactly the increased units in production 10.778 will decrease with the expected production (Table 5). The One-Way ANOVA test result indicates the statistical significance of the regression model that was run. Here, $P = 0.000$ which is less than 0.05 and indicates that, over all the regression model statistically significantly predicts the outcome variable (ie. It a good fit for the data). Therefore, It is revealed that there is a significant difference in the growth in the production in value and production in units, since the p value is less than 0.000

(Table 7). The Linear model state that the expected cumulative employment (Number) is equal to 11.981 to production in units. The b1 value suggest that cumulative employment number increased by 5.554% with every increase in production in units. The quadratic model states that the expected cumulative employment (number) is equal to $3.879 \text{ squared production in units}$. The positive value for b2 means that past a certain point, increased production in units would actually increases cumulative employment number more exactly the increased units in production past 3.708 will decrease with the expected cumulative employment. The One-Way

ANOVA test (Table 9) indicates that over all the regression model statistically significantly predicts the outcome variable (ie . It a good fit for the data). Therefore, It is revealed that there is a significant difference in the growth in the cumulative employment value and production in units, since the p value is less than 0.00. The Linear model state that the expected sales in value is equal to -626.495 to production in units. The b1 value suggest that sales in value decreases by .373% with every increase in production in units. The quadratic model states that the expected sales in value is equal to -3.966 squared production in units .The negative value for b2 means that past a certain point , increased production in units would actually decrease sales in value more exactly the increased units in production . -0.119 will decrease with the expected sales in value.

The One-Way ANOVA test (Table 11) indicates that over all the regression model statistically significantly predicts the outcome variable (ie . It a good fit for the data). Therefore, It is revealed that there is a significant difference in the growth in the sales in value and production in units , since the p value is less than 0.00. The Linear model state that the expected sales in unit is equal to 2.386 to production in units. The b1 value suggest that sales in units increase by 1.178% with every increase in production in units .The quadratic model states that the expected sales in units is equal to 14.244 squared production in units .The positive value for b2 means that past a certain point , increased production in units would actually increase sales in unit more exactly the increased units in production . past -0.00101 will decrease with the expected sales in units. The One-Way ANOVA test (Table 13) indicates that over all the regression model statistically significantly predicts the outcome variable (ie . It a good fit for the data). Therefore, It is revealed that there is a significant difference in the growth in the sales in units and production in units , since the p value is less than 0.000.

The hypothesis of the study was that there is no significance difference in the mean growth of KVI units and other variables viz. sales in value, Production in units , cumulative employment , production in value , cumulative employment number , sales in units. The test results given in Tables 3,5,7,9 and 11 revealed that there is a significant difference in the mean growth of all the variables considered for the purpose of the study. Therefore, the null hypothesis **H₀₁ stating that there is no significance difference in the mean growth in the mean growth of KVI units**

and other variables viz. sales in value, Production in units , cumulative employment , production in value , cumulative employment number , sales in units is rejected since the p values are less than 0.05.

Conclusion

The AAGR of production, sales and employment Khadi and Village Industries were 7.399 and 9.453, 7.220 and 6.909 ,3.146 and 7.157 respectively during the period 2006 to 2013-14. CAGR for the same period was negative for production (-1.56) sales (-1.596) and cumulative employment

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References

- 1.Strategic Action Plan of Ministry of Micro, Small and Medium Enterprises 2012-13.
- 2.Report of the working group on MSMEs growth for 12th five year plan (2012-2017)
- 3.MSMEs XII Plan Approach Paper, Planning Commission Hyderabad, 2012-13
- 4.WWW.Khadi Village Industries Commission, Annual Report,
- 5.Jabarullaha J. and Rajeswari V., "Performance of khadi and Village Industries in India", Southern Economist, Vol. 43. No. 8, Jan. 15, 2003. p. 12.
6. Desai Vasant, "Rural Development in India", Himalaya Publication 2005, p.375.
7. Siddiqui, Saif, "Rural Entrepreneurship and Poverty Alleviation Programmes", Yojana Dec. 2003, p.2]

Table 1 Performance of Khadi and village industry sector

Year	Production (values in Rs Crore)		Sales (values in Rs crore)		Cumulative employment	
	KHADI .I	VI	KHADI.I	VI	KHADI.I	VI
2006-07	491.52	13527.19	663.19	18888.21	8.84	80.08
2007-08	543.39	16134.32	724.39	20819.09	9.16	90.11
2008-09	585.25	16753.62	799.60	21948.59	9.50	94.41
2009-10	628.98	17508.00	867.01	23254.53	9.81	98.72
2010-11	673.01	19198.85	917.26	24875.73	10.15	103.65
2011-12	716.98	21135.06	967.87	25829.26	10.45	108.65
2012-13	761.93	23262.31	1021.56	26818.13	10.71	114.05
2013-14	809.70	25298.00	1079.24	30073.16	10.98	129.40
AAGR	7.399	9.453	7.220	6.909	3.146	7.157
CAGR	-0.794	-0.766	-0.796	-0.800	-0.844	-0.798

Source : Compiled from secondary data.

Table 2 Model Summary and Parameter Estimates

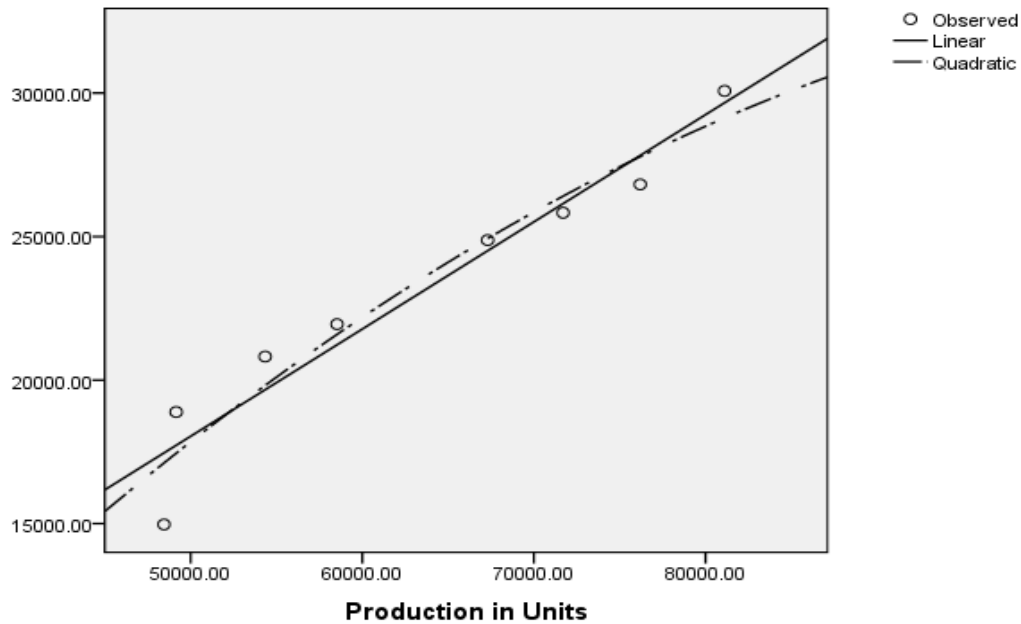
Dependent Variable: Sales in value

Equation	Model Summary					Parameter Estimates		
	R Square	F	df1	df2	Sig.	Constant	b1	b2
Linear	.934	84.439	1	6	.000	-626.868	.373	
Quadratic	.939	38.529	2	5	.001	-1.397E4	.805	-3.374E-6

The independent variable is Production in Units.

Source: compiled from secondary data.

Figure 1

Sales in Value**Table 3 ANOVA**

	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
<i>Regression</i>	1070.744	1	1070.744	47.125	.000
<i>Residual</i>	136.329	6	22.722		
<i>Total</i>	1207.074	7			

The independent variable is Production in Units.

Source: compiled from secondary data.

Table 4 Model Summary and Parameter Estimates

Dependent Variable :Cumulative Employment (Value)

Equation	Model Summary					Parameter Estimates		
	R Square	F	df1	df2	Sig.	Constant	b1	b2
Linear	.887	47.125	1	6	.000	38.019	.001	
Quadratic	.897	21.867	2	5	.003	88.169	.000	1.268E-8

The independent variable is Production in Units.

Source: compiled from secondary data.

Figure 2

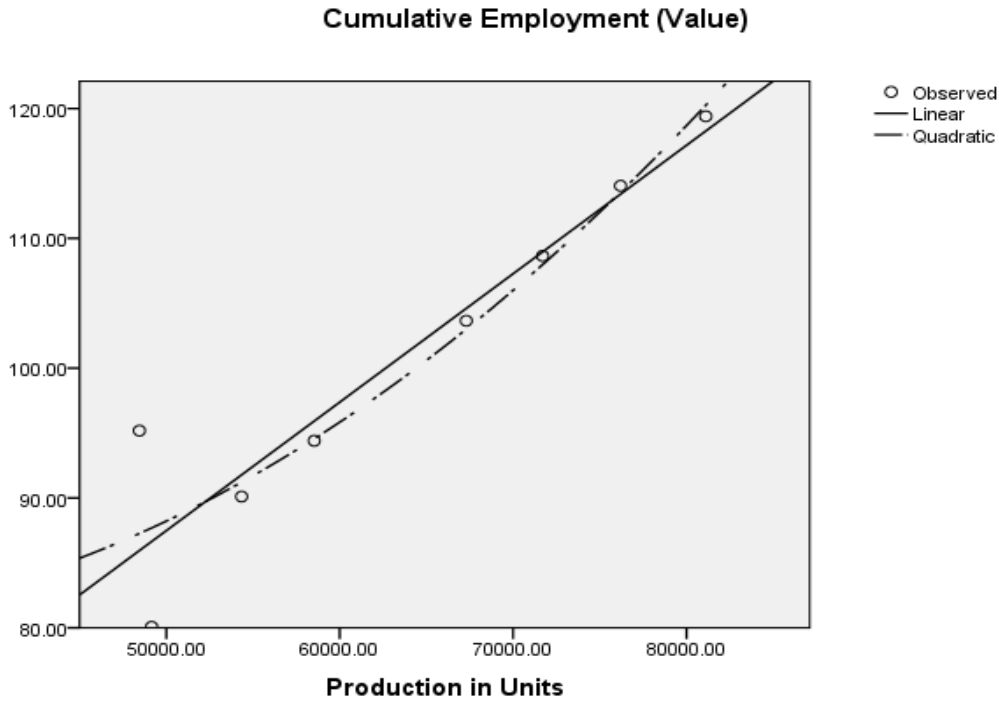


Table 5 ANNOVA

	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	F	Sig.
<i>Regression</i>	1070.744	1	1070.744	47.125	.000
<i>Residual</i>	136.329	6	22.722		
<i>Total</i>	1207.074	7			

The independent variable is Production in Units.

Source: compiled from secondary data.

Table 6 Model summary and parameters estimates

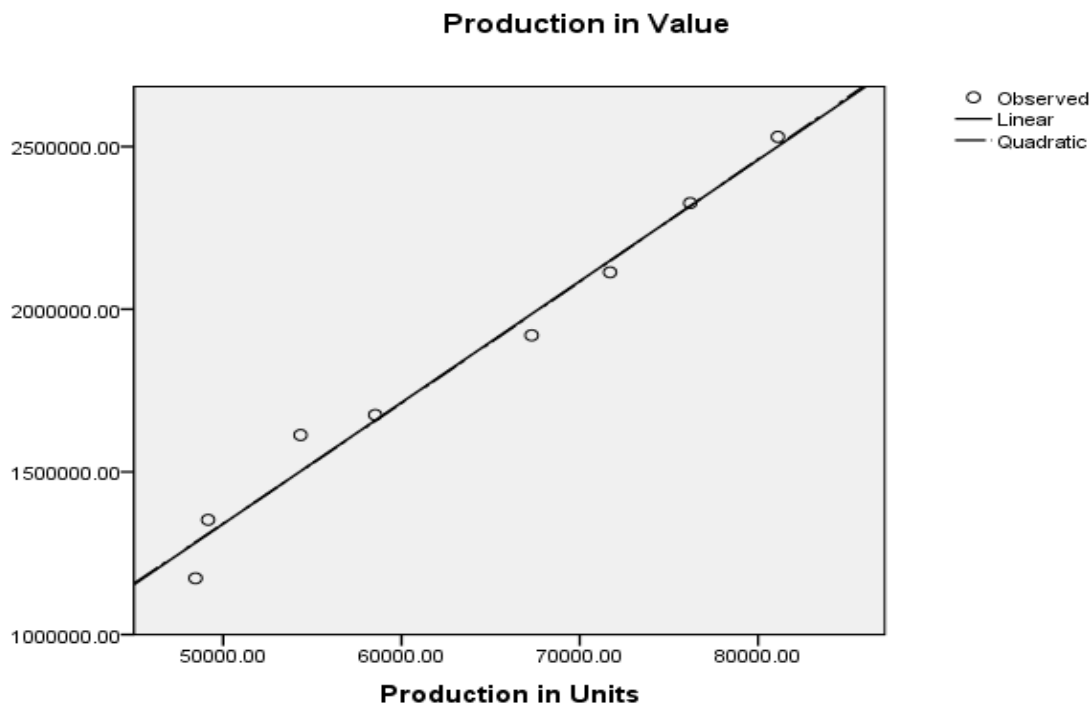
Dependent Variable: Production in Value

Equation	Model Summary					Parameter Estimates		
	R Square	F	df1	df2	Sig.	Constant	b1	b2
Linear	.979	275.640	1	6	.000	-5.241E5	37.290	
Quadratic	.979	114.924	2	5	.000	-4.596E5	35.201	1.633E-5

The independent variable is Production in Units.

Source: compiled from secondary data.

Figure 3

**Table 7 ANOVA**

	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.521E12	1	1.521E12	275.640	.000
Residual	3.311E10	6	5.518E9		

Table 7 ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.521E12	1	1.521E12	275.640	.000
Residual	3.311E10	6	5.518E9		
Total	1.554E12	7			

The independent variable is Production in Units.

Source: compiled from secondary data.

Table 8 Model summary and Parameter Estimates

Dependent Variable: Cumulative Employment (Number)

Equation	Model Summary					Parameter Estimates		
	R Square	F	df1	df2	Sig.	Constant	b1	b2
Linear	.839	31.357	1	6	.001	6.427	5.554E-5	
Quadratic	.860	15.361	2	5	.007	10.515	-7.670E-5	1.034E-9

The independent variable is Production in Units.

Source: compiled from secondary data.

Figure 4

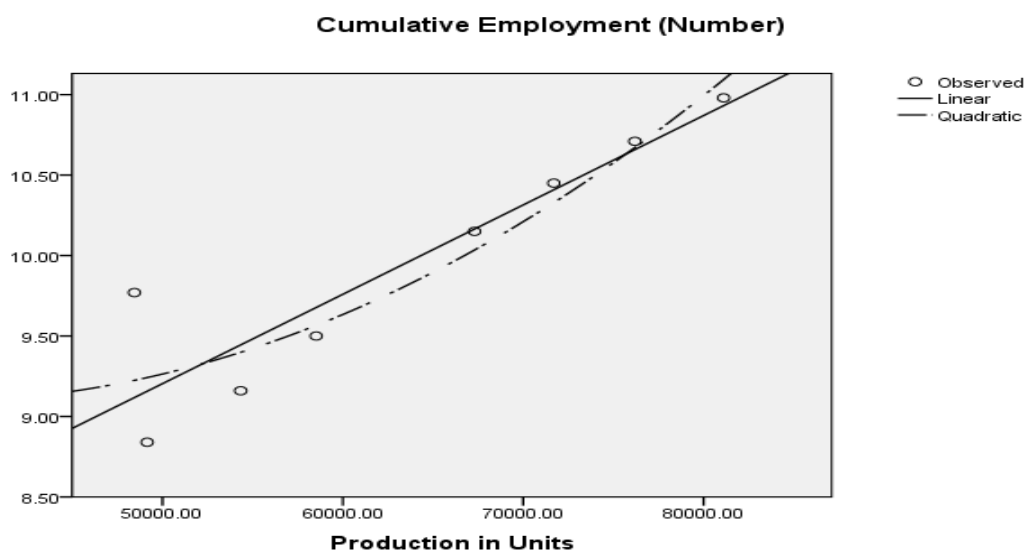


Table 9 ANNOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	3.374	1	3.374	31.357	.001
Residual	.646	6	.108		
Total	4.019	7			

The independent variable is Production in Units.

Source: compiled from secondary data.

Table 10 Model summary and Parameter Estimates

Dependent Variable :Sales in value

Equation	Model Summary					Parameter Estimates		
	R Square	F	df1	df2	Sig.	Constant	b1	b2
Linear	.934	84.439	1	6	.000	-626.868	.373	
Quadratic	.939	38.529	2	5	.001	-1.397E4	.805	-3.374E-6

The independent variable is Production in Units.

Source: compiled from secondary data.

Figure

5

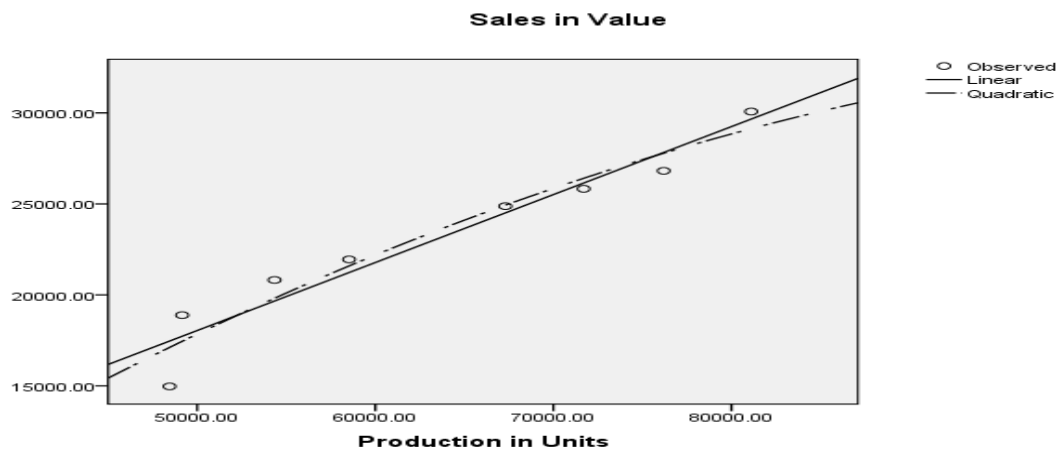


Table 11 ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.525E8	1	1.525E8	84.439	.000
Residual	1.084E7	6	1806371.419		
Total	1.634E8	7			

The independent variable is Production in Units.

Source: compiled from secondary data.

Table 12 Model summary and parameter estimates

Dependent Variable: Sales in Units

Equation	Model Summary					Parameter Estimates		
	R Square	F	df1	df2	Sig.	Constant	b1	b2
Linear	.951	115.454	1	6	.000	1.208E4	1.178	
Quadratic	.955	52.875	2	5	.000	4.908E4	-.019	9.355E-6

The independent variable is Production in Units.

Source: compiled from secondary data.

Figure 6



Table 13 ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.518E9	1	1.518E9	115.454	.000
Residual	7.891E7	6	1.315E7		
Total	1.597E9	7			

The independent variable is Production in Units.

Source: compiled from secondary data.