CHAPTER VI

Analysis and Interpretation

6.1: Analysis of Individual Gardens

On the basis of collected data from individual tea gardens, Firstly, we have calculated correlation coefficient between average productivity and man days used, average productivity and social cost, average productivity and number of bipartite settlements and average productivity and number of gate meetings held. Secondly, we have established multiple regression equation of each tea garden taking average productivity as dependent variable and man days used social cost, number of bipartite settlements and number of gate meetings held as independent variables. In multiple regression equation 'x'implies regression coefficient between average productivity and man days used, 'm' implies regression coefficient between average productivity and social cost, 'w" implies regression coefficient between average productivity and number of bipartite settlements and 'z" implies regression coefficient between average productivity and number of gate meetings held. We have also calculated Durbin-Watson test to see the existence of auto correlation to measure the validity and reliability of collected data. The result of correlation coefficient, multiple regression equation and the result of Durbin-Watson test are stated below.

Table-6.1: RESULT OF CORRELATION COEFFICIENT

Name of Gardens	Productivity and Man days Used	Productivity and Social Cost
Washabari	.970	.996
Madhu	.402	.652
Kadambini	.053	.938
Dima	.376	.442
Beach	.836	.961
Chulsa	.991	.964
Aibhell	.847	.982
Gandrapara	.080	.965
Jiti	.076	.976
Hope	.002	.982
Banarhat	.988	.959
Karbala	.992	.912
Hilla	.912	.244
Newdooars	.054	.221
Choonabhati	.993	.816
Kilcott	.965	.945
Nagaisuri	.984	.993
Bagrakot	.279	.732
Birpara	.778	.982
Lankapara	.974	.994
Rungamuttee	.990	.906
Damdim	.930	.491
Batabari	.056	.653
NeoraNuddy	.195	.896
Totapara	.999	.998
Ethelbari	.997	.989
Baintgoorie	.951	.978
Kumargram	.955	.961
Matelli	.930	.797
Kurti	.748	.828

Table-6.1: RESULT OF CORRELATION COEFFICIENT

Name of Gardens	Productivity and Number of Bipartite Settlement	Productivity and Number of Gate Meeting
Washabari	.989	-.971
Madhu	.618	-.713
Kadambini	.803	-957
Dima	.703	-.890
Beach	.965	-.973
Chulsa	.670	-.947
Aibhell	.975	-.869
Gandrapara	.926	-.869
Jiti	.754	-.923
Hope	.848	-.815
Banarhat	.791	-.931
Karbala	.920	-967
Hilla	.946	-.881
Newdooars	.770	-.706
Choonabhati	.681	-.935
Kilcott	.808	-.930
Nagaisuri	.900	-.916
Bagrakot	.741	-.931
Birpara	.941	-.992
Lankapara	.870	-.972
Rungamuttee	.911	-.872
Damdim	.606	-.983
Batabari	.943	-.887
NeoraNuddy	.890	-.708
Totapara	.895	-.809
Ethelbari	.810	-.696
Baintgoorie	.866	-.942
Kumargram	.989	-.926
Matelli	.892	-.938
Kurti	.924	-.837

Table-6.2: RESULT OF MULTIPLE REGRESSION EQUATION AND DURBIN - WATSON TEST

Name of Gardens	Productivity Vs. Man days Used ,Social Cost, Bipartite Settlements & No. of Gate Meetings	Durbin-Watson Test
Washabari	Y=50.10+.002x+2.38m+.79w-1.69z	2.06
Madhu	Y=413.73+.001x+4.71m+2.77w-4.28z	1.92
Kadambini	Y=628.21+.002x+8.91m+1.45w-1.70z	1.97
Dima	Y=1691.27+.002x+.001m+3.69w-3.11z	1.97
Beach	Y=570.56+.002x+.001m+2w-1.56z	2.02
Chulsa	Y=116.76+.001x+2.53m+1.76w-2.22z	1.91
Aibheel	Y=689.26+.002x+5.75m+7.98w-15.63z	1.95
Gandrapara	Y=-74.78+.002x+.001m+6.29w-3.79z	1.86
Jiti	Y=407.79+.002x+.001m+1.30w-5.45z	1.93
Hope	Y=618.15+.002x+6.95m+1.53w-8z	1.76
Banarhat	Y=266.93+.001x+2.29m+2.35w-9.17z	1.90
Karbala	Y=-789.99+.003x+3.48m+3.04w-15.59z	2.06
Hilla	Y=-9.97+.001x+.001m+6.71w-4.27z	1.91
Newdooars	Y=1252.90+.002x+.001m+7.06w-5.30z	1.82
Choonabhati	Y=851+.001x+8.59m+.83w-1.71z	1.93
Kilcott	Y=-66.48+.001x+.001m+2.24w-7.31z	2.03
Nagaisuri	Y=-47.61+.001x+9.96m+.57w-1.59z	2.07
Bagrakot	Y=-159.38+.001x+8.20m+1.62w-6.65z	1.86
Birpara	Y=803.90+5.30x+6.18m+.53w-4.58z	2.22
Lankapara	Y=337.39+.001x+4.91m+.22w-.87z	2.04
Rungamuttee	Y=255.78+.001x+2.38m+8.61w-1.13z	2.08
Damdim	Y=629.07+.001x+1.70m+1.32w-4.36z	1.95
Batabari	Y=766.27+2.24x+8.78m+7.84w-7.41z	1.93
Neoranuddy	Y=434.84+.001x+3.17m+3.13w-3.05z	1.98
Totapara	Y=22.29+.002x+.001m+.39w-.56z	1.96
Ethelbari	Y=21.25+.001x+.001m+.040w-.19z	1.97
Baintgoorie	Y=374.95+.001x+.001m+1.34w-3.19z	1.99
Kumargram	Y=333.52+.001x+7.89m+2.09w-1.40z	1.96
Matelli	Y=512.13+.001x+4.21m+1.55w-2.32z	1.92
Kurti	Y=83.43+.001u+.001m+3.05w-8.93z	1.95

6.2: Garden wise Findings

1. WASHABARI TEA ESTATE

From the statistical result revealed from the table in case of Washabari Tea Garden, it is found that the correlation between productivity and man days used is .970.It indicates a very high degree of positive correlation between productivity and man days used. It means that greater the man days used higher is the productivity. It further means that higher man days used leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'x' is positive. It means that higher the man days used has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Secondly, from the statistical result revealed from the table it is found that correlation between productivity and social cost is .996.It indicates a very high degree of positive correlation between productivity and social cost. It means that greater the social cost, higher is the productivity. It further means that higher social cost leads to better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'm' is positive. It means that higher the social cost incurred has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Thirdly, it is found that the correlation between productivity and disputes solved through bipartite settlement is .989.It indicates a very high degree of positive correlation between productivity and number of disputes solved through bipartite settlement. It means that greater the number of disputes solved through bipartite settlement machinery, higher is the productivity. It further means that higher the number of disputes solved leads to towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'w' is positive. It means that higher the number of disputes settled through bipartite machinery has got positive impact on productivity. If we fit a regression line its slope will be left to right upward moving.

Fourthly, it is found that the coefficient of correlation between productivity and number of gate meeting is -.971.It indicates a high degree of negative correlation between productivity and number of gate meeting .It means that greater the number of gate meeting, lower is the productivity. It further means that higher the number of gate meeting leads towards worse productivity.

From the multiple regression equation it is observed that the value of coefficient of 'z' is negative. It means that higher the number of gate meeting has got negative impact on productivity. If we fit a regression line its slope will be a right to left upward moving.

The result of Durbin Watson Test in case of Washabari Tea Estate is 2.06; it proves the data used in case of our research work is free from the existence of auto correlation.

2. MADHU TEA ESTATE

From the statistical result revealed from the table in case of MadhuTea Garden it is found that the correlation between productivity and man days used is .402.It indicates a moderate degree of positive correlation between productivity and man days used. It means that greater the man days used higher is the productivity. It further means that higher man days used leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'x' is positive. It means that higher the man days used has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Secondly, from the statistical result revealed from the table it is found that correlation between productivity and social cost is .652.It indicates a moderate degree of positive correlation between productivity and social cost. It means that greater the social cost, higher is the productivity. It further means that higher social cost leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'm' is positive. It means that higher the social cost incurred has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Thirdly, it is found that the correlation between productivity and disputes solved through bipartite settlement is .618.It indicates a moderate degree of positive correlation between productivity and number of disputes solved through bipartite settlement. It means that greater the number of disputes solved through bipartite settlement machinery, higher is the productivity. It further means that higher the number of disputes solved leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'w' is positive. It means that higher the number of disputes settled through bipartite machinery has got positive impact on productivity. If we fit a regression line its slope will be left to right upward moving.

Fourthly, it is found that the coefficient of correlation between productivity and number of gate meeting is -.713.It indicates a high degree of negative correlation between productivity and number of gate meeting .It means that greater the number of gate meeting, lower is the productivity. It further means that higher the number of gate meeting leads towards worse productivity.

From the multiple regression equation it is observed that the value of coefficient of 'z' is negative. It means that higher the number of gate meeting has got negative impact on productivity. If we fit a regression line its slope will be a right to left upward moving.

The result of Durbin Watson Test in case of Madhu Tea Estate is 1.92; it proves the data used in case of our research work is free from the existence of auto correlation.

3. KADAMBINI TEA ESTATE

From the statistical result revealed from the table in case of Kadambini Tea Garden it is found that the correlation between productivity and man days used is .053.It indicates a very low degree of positive correlation between productivity and man days used. It means that greater the man days used higher is the productivity. It further means that higher man days used leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'x' is positive. It means that higher the man days used has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Secondly, from the statistical result revealed from the table it is found that correlation between productivity and social cost is .938.It indicates a very high degree of positive correlation between productivity and social cost. It means that greater the social cost, higher is the productivity. It further means that higher social cost leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'm' is positive. It means that higher the social cost incurred has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Thirdly, it is found that the correlation between productivity and disputes solved through bipartite settlement is .803.It indicates a high degree of positive correlation between productivity and number of disputes solved through bipartite settlement. It means that greater the number of disputes solved through bipartite settlement machinery, higher is the productivity. It further means that higher the number of disputes solved leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'w' is positive. It means that higher the number of disputes settled through bipartite machinery has got positive impact on productivity. If we fit a regression line its slope will be left to right upward moving.

Fourthly, it is found that the coefficient of correlation between productivity and number of gate meeting is -.957.It indicates a very high degree of negative correlation between productivity and number of gate meeting .It means that greater the number of gate meeting, lower is the productivity. It further means that higher the number of gate meeting leads towards worse productivity.

From the multiple regression equation it is observed that the value of coefficient of 'z' is negative. It means that higher the number of gate meeting has got negative impact on productivity. If we fit a regression line its slope will be a right to left upward moving.

The result of Durbin Watson Test in case of Kadambini Tea Estate is 1.97; it proves the data used in case of our research work is free from the existence of auto correlation.

4. DIMA TEA ESTATE

From the statistical result revealed from the table in case of Dima Tea Garden it is found that the correlation between productivity and man days used is .376.It indicates a low degree of positive correlation between productivity and man days used. It means that greater the man days used higher is the productivity. It further means that higher man days used leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'x' is positive. It means that higher the man days used has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Secondly, from the statistical result revealed from the table it is found that correlation between productivity and social cost is .442.It indicates a moderate degree of positive correlation between productivity and social cost. It means that greater the social cost, higher is the productivity. It further means that higher social cost leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'm' is positive. It means that higher the social cost incurred has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Thirdly, it is found that the correlation between productivity and disputes solved through bipartite settlement is .703.It indicates a high degree of positive correlation between productivity and number of disputes solved through bipartite settlement. It means that greater the number of disputes solved through bipartite settlement machinery, higher is the productivity. It further means that higher the number of disputes solved leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'w' is positive. It means that higher the number of disputes settled through bipartite machinery has got positive impact on productivity. If we fit a regression line its slope will be left to right upward moving.

Fourthly, it is found that the coefficient of correlation between productivity and number of gate meeting is -.890.It indicates a very high degree of negative correlation between productivity and number of gate meeting .It means that greater the number of gate meeting, lower is the productivity. It further means that higher the number of gate meeting leads towards worse productivity.

From the multiple regression equation it is observed that the value of coefficient of 'z' is negative. It means that higher the number of gate meeting has got negative impact on productivity. If we fit a regression line its slope will be a right to left upward moving.

The result of Durbin Watson Test in case of Dima Tea Estate is 1.97; it proves the data used in case of our research work is free from the existence of auto correlation.

5. BEACH TEA ESTATE

From the statistical result revealed from the table in case of Beach Tea Garden it is found that the correlation between productivity and man days used is .836.It indicates a high degree of positive correlation between productivity and man days used. It means that greater the man days used higher is the productivity. It further means that higher man days used leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'x' is positive. It means that higher the man days used has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Secondly, from the statistical result revealed from the table it is found that correlation between productivity and social cost is .961.It indicates a very high degree of positive correlation between productivity and social cost. It means that greater the social cost, higher is the productivity. It further means that higher social cost leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'm' is positive. It means that higher the social cost incurred has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Thirdly, it is found that the correlation between productivity and disputes solved through bipartite settlement is .965.It indicates a very high degree of positive correlation between productivity and number of disputes solved through bipartite settlement. It means that greater the number of disputes solved through bipartite settlement machinery, higher is the productivity. It further means that higher the number of disputes solved leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'w' is positive. It means that higher the number of disputes settled through bipartite machinery has got positive impact on productivity. If we fit a regression line its slope will be left to right upward moving.

Fourthly, it is found that the coefficient of correlation between productivity and number of gate meeting is -.973.It indicates a very strong degree of negative correlation between productivity and number of gate meeting .It means that greater the number of gate meeting, lower is the productivity. It further means that higher the number of gate meeting leads towards worse productivity.

From the multiple regression equation between productivity and number of gate meeting it is observed that the value of coefficient of 'z' is negative. It means that higher the number of gate meeting has got negative impact on productivity. If we fit a regression line its slope will be a right to left upward moving.

The result of Durbin Watson Test in case of Beach Tea Estate is 2.02; it proves the data used in case of our research work is free from the existence of auto correlation.

6. CHULSA TEA GARDEN

From the statistical result revealed from the table in case of Chulsa Tea Garden it is found that the correlation between productivity and man days used is .991.It indicates a very high degree of positive correlation between productivity and man days used. It means that greater the man days used higher is the productivity. It further means that higher man days used leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'x' is positive. It means that higher the man days used has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Secondly, from the statistical result revealed from the table it is found that correlation between productivity and social cost is .964.It indicates a strong degree of positive correlation between productivity and social cost. It means that greater the social cost, higher is the productivity. It further means that higher social cost leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'm' is positive. It means that higher the social cost incurred has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Thirdly, it is found that the correlation between productivity and disputes solved through bipartite settlement is .670.It indicates a moderate degree of positive correlation between productivity and number of disputes solved through bipartite settlement. It means that greater the number of disputes solved through bipartite settlement machinery, higher is the productivity. It further means that higher the number of disputes solved leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'w' is positive. It means that higher the number of disputes settled through bipartite machinery has got positive impact on productivity. If we fit a regression line its slope will be left to right upward moving.

Fourthly, it is found that the coefficient of correlation between productivity and number of gate meeting is -.947.It indicates a very high negative correlation between productivity and number of gate meeting .It means that greater the number of gate meeting, lower is the productivity. It further means that higher the number of gate meeting leads towards worse productivity.

From the multiple regression equation it is observed that the value of coefficient of 'z' is negative. It means that higher the number of gate meeting has got negative impact on productivity. If we fit a regression line its slope will be a right to left upward moving.

The result of Durbin Watson Test in case of Chulsa Tea Estate is 1.91; it proves the data used in case of our research work is free from the existence of auto correlation.

7. AIBHEEL TEA ESTATE

From the statistical result revealed from the table in case of Aibhell Tea Garden it is found that the correlation between productivity and man days used is .847.It indicates a strong degree of positive correlation between productivity and man days used. It means that greater the man days used higher is the productivity. It further means that higher man days used leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'x' is positive. It means that higher the man days used has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Secondly, from the statistical result revealed from the table it is found that correlation between productivity and social cost is .982.It indicates a very strong degree of positive correlation between productivity and social cost. It means that greater the social cost, higher is the productivity. It further means that higher social cost leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'm' is positive. It means that higher the social cost incurred has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Thirdly, it is found that the correlation between productivity and disputes solved through bipartite settlement is .975.It indicates a very high degree of positive correlation between productivity and number of disputes solved through bipartite settlement. It means that greater the number of disputes solved through bipartite settlement machinery, higher is the productivity. It further means that higher the number of disputes solved leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'w' is positive. It means that higher the number of disputes settled through bipartite machinery has got positive impact on productivity. If we fit a regression line its slope will be left to right upward moving.

Fourthly, it is found that the coefficient of correlation between productivity and number of gate meeting is -.869.It indicates a high degree of negative correlation between productivity and number of gate meeting .It means that greater the number of gate meeting, lower is the productivity. It further means that higher the number of gate meeting leads towards worse productivity.

From the multiple regression equation it is observed that the value of coefficient of 'z' is negative. It means that higher the number of gate meeting has got negative impact on productivity. If we fit a regression line its slope will be a right to left upward moving.

The result of Durbin Watson Test in case of Aibheel Tea Estate is 1.95; it proves the data used in case of our research work is free from the existence of auto correlation.

8. GANDRAPARA TEA ESTATE

From the statistical result revealed from the table in case of Gandrapara Tea Garden it is found that the correlation between productivity and man days used is .080.It indicates a very low degree of positive correlation between productivity and man days used. It means that greater the man days used higher is the productivity. It further means that higher man days used leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'x' is positive. It means that higher the man days used has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Secondly, from the statistical result revealed from the table it is found that correlation between productivity and social cost is .965.It indicates a very high degree of positive correlation between productivity and social cost. It means that greater the social cost, higher is the productivity. It further means that higher social cost leads better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'm' is positive. It means that higher the social cost incurred has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Thirdly, it is found that the correlation between productivity and disputes solved through bipartite settlement is .926.It indicates a very high degree of positive correlation between productivity and number of disputes solved through bipartite settlement. It means that greater the number of disputes solved through bipartite settlement machinery, higher is the productivity. It further means that higher the number of disputes solved leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'w' is positive. It means that higher the number of disputes settled through bipartite machinery has got positive impact on productivity. If we fit a regression line its slope will be left to right upward moving.

Fourthly, it is found that the coefficient of correlation between productivity and number of gate meeting is -.869.It indicates a high degree of negative correlation between productivity and number of gate meeting .It means that greater the number of gate meeting, lower is the productivity. It further means that higher the number of gate meeting leads towards worse productivity.

From the multiple regression equation it is observed that the value of coefficient of 'z' is negative. It means that higher the number of gate meeting has got negative impact on productivity. If we fit a regression line its slope will be a right to left upward moving.

The result of Durbin Watson Test in case of Gandrapara Tea Estate is 1.86; it proves the data used in case of our research work is free from the existence of auto correlation.

9. JITI TEA GARDEN

From the statistical result revealed from the table in case of Jiti Tea Garden it is found that the correlation between productivity and man days used is .076.It indicates a very low degree of positive correlation between productivity and man days used. It means that greater the man days used higher is the productivity. It further means that higher man days used leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'x' is positive. It means that higher the man days used has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Secondly, from the statistical result revealed from the table it is found that correlation between productivity and social cost is .976.It indicates a very high degree of positive correlation between productivity and social cost. It means that greater the social cost, higher is the productivity. It further means that higher social cost leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'm' is positive. It means that higher the social cost incurred has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Thirdly, it is found that the correlation between productivity and disputes solved through bipartite settlement is .754.It indicates a moderate degree of positive correlation between productivity and number of disputes solved through bipartite settlement. It means that greater the number of disputes solved through bipartite settlement machinery, higher is the productivity. It further means that higher the number of disputes solved leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'w' is positive. It means that higher the number of disputes settled through bipartite machinery has got positive impact on productivity. If we fit a regression line its slope will be left to right upward moving.

Fourthly, it is found that the coefficient of correlation between productivity and number of gate meeting is -.923.It indicates a very high degree of negative correlation between productivity and number of gate meeting .It means that greater the number of gate meeting, lower is the productivity. It further means that higher the number of gate meeting leads towards worse productivity.

From the multiple regression equation it is observed that the value of coefficient of 'z' is negative. It means that higher the number of gate meeting has got negative impact on productivity. If we fit a regression line its slope will be a right to left upward moving.

The result of Durbin Watson Test in case of Jiti Tea Estate is 1.93; it proves the data used in case of our research work is free from the existence of auto correlation.

10. HOPE TEA GARDEN

From the statistical result revealed from the table in case of Hope Tea Garden it is found that the correlation between productivity and man days used is .002 .It indicates a very low degree of positive correlation between productivity and man days used. It means that greater the man days used higher is the productivity. It further means that higher man days used leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'x' is positive. It means that higher the man days used has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Secondly, from the statistical result revealed from the table it is found that correlation between productivity and social cost is .982.It indicates a very high degree of positive correlation between productivity and social cost. It means that greater the social cost, higher is the productivity. It further means that higher social cost leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'm' is positive. It means that higher the social cost incurred has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Thirdly, it is found that the correlation between productivity and disputes solved through bipartite settlement is .848.It indicates a strong degree of positive correlation between productivity and number of disputes solved through bipartite settlement. It means that greater the number of disputes solved through bipartite settlement machinery, higher is the productivity. It further means that higher the number of disputes solved leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'w' is positive. It means that higher the number of disputes settled through bipartite machinery has got positive impact on productivity. If we fit a regression line its slope will be left to right upward moving.

Fourthly, it is found that the coefficient of correlation between productivity and number of gate meeting is -.815.It indicates a strong degree of negative correlation between productivity and number of gate meeting .It means that greater the number of gate meeting, lower is the productivity. It further means that higher the number of gate meeting leads towards worse productivity.

From the multiple regression equation it is observed that the value of coefficient of 'z' is negative. It means that higher the number of gate meeting has got negative impact on productivity. If we fit a regression line its slope will be a right to left upward moving.

The result of Durbin Watson Test in case of Hope Tea Estate is 1.76; it proves the data used in case of our research work is free from the existence of auto correlation.

11. BANARHAT TEA GARDEN

From the statistical result revealed from the table in case of Banarhat Tea Garden it is found that the correlation between productivity and man days used is .988.It indicates a very strong degree of positive correlation between productivity and man days used. It means that greater the man days used higher is the productivity. It further means that higher man days used leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'x' is positive. It means that higher the man days used has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Secondly, from the statistical result revealed from the table it is found that correlation between productivity and social cost is .959.It indicates a very high degree of positive correlation between productivity and social cost. It means that greater the social cost, higher is the productivity. It further means that higher social cost leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'm' is positive. It means that higher the social cost incurred has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Thirdly, it is found that the correlation between productivity and disputes solved through bipartite settlement is .791.It indicates a high degree of positive correlation between productivity and number of disputes solved through bipartite settlement. It means that greater the number of disputes solved through bipartite settlement machinery, higher is the productivity. It further means that higher the number of disputes solved leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'w' is positive. It means that higher the number of disputes settled through bipartite machinery has got positive impact on productivity. If we fit a regression line its slope will be left to right upward moving.

Fourthly, it is found that the coefficient of correlation between productivity and number of gate meeting is -.931.It indicates a very strong degree of negative correlation between productivity and number of gate meeting .It means that greater the number of gate meeting, lower is the productivity. It further means that higher the number of gate meeting leads towards worse productivity.

From the multiple regression equation it is observed that the value of coefficient of 'z' is negative. It means that higher the number of gate meeting has got negative impact on productivity. If we fit a regression line its slope will be a right to left upward moving.

The result of Durbin Watson Test in case of Banarhat Tea Estate is 1.90; it proves the data used in case of our research work is free from the existence of auto correlation.

12. KARBALA TEA ESTATE

From the statistical result revealed from the table in case of Karbala Tea Garden it is found that the correlation between productivity and man days used is .992.It indicates a very strong degree of positive correlation between productivity and man days used. It means that greater the man days used higher is the productivity. It further means that higher man days used leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'x' is positive. It means that higher the man days used has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Secondly, from the statistical result revealed from the table it is found that correlation between productivity and social cost is .912.It indicates a very high degree of positive correlation between productivity and social cost. It means that greater the social cost, higher is the productivity. It further means that higher social cost leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'm' is positive. It means that higher the social cost incurred has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Thirdly, it is found that the correlation between productivity and disputes solved through bipartite settlement is .920.It indicates a very strong degree of positive correlation between productivity and number of disputes solved through bipartite settlement. It means that greater the number of disputes solved through bipartite settlement machinery, higher is the productivity. It further means that higher the number of disputes solved leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'w' is positive. It means that higher the number of disputes settled through bipartite machinery has got positive impact on productivity. If we fit a regression line its slope will be left to right upward moving.

Fourthly, it is found that the coefficient of correlation between productivity and number of gate meeting is -.967.It indicates a very high degree of negative correlation between productivity and number of gate meeting .It means that greater the number of gate meeting, lower is the productivity. It further means that higher the number of gate meeting leads towards worse productivity.

From the multiple regression equation it is observed that the value of coefficient of 'z' is negative. It means that higher the number of gate meeting has got negative impact on productivity. If we fit a regression line its slope will be a right to left upward moving.

The result of Durbin Watson Test in case of Karbala Tea Estate is 2.06; it proves the data used in case of our research work is free from the existence of auto correlation.

13. HILLA TEA ESTATE

From the statistical result revealed from the table in case of Hilla Tea Garden it is found that the correlation between productivity and man days used is .912.It indicates a very high degree of positive correlation between productivity and man days used. It means that greater the man days used higher is the productivity. It further means that higher man days used leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'x' is positive. It means that higher the man days used has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Secondly, from the statistical result revealed from the table it is found that correlation between productivity and social cost is .244.It indicates a positive correlation between productivity and social cost. It means that greater the social cost, higher is the productivity. It further means that higher social cost leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'm' is positive. It means that higher the social cost incurred has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Thirdly, it is found that the correlation between productivity and disputes solved through bipartite settlement is .946.It indicates a very high degree of positive correlation between productivity and number of disputes solved through bipartite settlement. It means that greater the number of disputes solved through bipartite settlement machinery, higher is the productivity. It further means that higher the number of disputes solved leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'w' is positive. It means that higher the number of disputes settled through bipartite machinery has got positive impact on productivity. If we fit a regression line its slope will be left to right upward moving.

Fourthly, it is found that the coefficient of correlation between productivity and number of gate meeting is -.881.It indicates a high degree of negative correlation between productivity and number of gate meeting .It means that greater the number of gate meeting, lower is the productivity. It further means that higher the number of gate meeting leads towards worse productivity.

From the multiple regression equation it is observed that the value of coefficient of 'z' is negative. It means that higher the number of gate meeting has got negative impact on productivity. If we fit a regression line its slope will be a right to left upward moving.

The result of Durbin Watson Test in case of Hilla Tea Estate is1.91; it proves the data used in case of our research work is free from the existence of auto correlation.

14. NEW DOOARS TEA ESTATE

From the statistical result revealed from the table in case of Newdooars Tea Garden it is found that the correlation between productivity and man days used is -.054.It indicates a very low degree of positive correlation between productivity and man days used. It means that greater the man days used higher is the productivity. It further means that higher man days used leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'x' is positive. It means that higher the man days used has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Secondly, from the statistical result revealed from the table it is found that correlation between productivity and social cost is .221.It indicates a low degree of positive correlation between productivity and social cost. It means that greater the social cost, higher is the productivity. It further means that higher social cost leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'm' is positive. It means that higher the social cost incurred has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Thirdly, it is found that the correlation between productivity and disputes solved through bipartite settlement is .770.It indicates a strong degree of positive correlation between productivity and number of disputes solved through bipartite settlement. It means that greater the number of disputes solved through bipartite settlement machinery, higher is the productivity. It further means that higher the number of disputes solved leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'w' is positive. It means that higher the number of disputes settled through bipartite machinery has got positive impact on productivity. If we fit a regression line its slope will be left to right upward moving.

Fourthly, it is found that the coefficient of correlation between productivity and number of gate meeting is -.706.It indicates a strong degree of negative correlation between productivity and number of gate meeting .It means that greater the number of gate meeting, lower is the productivity. It further means that higher the number of gate meeting leads towards worse productivity.

From the multiple regression equation it is observed that the value of coefficient of 'z' is negative. It means that higher the number of gate meeting has got negative impact on productivity. If we fit a regression line its slope will be a right to left upward moving.

The result of Durbin Watson Test in case of New Dooars Tea Estate is 1.82; it proves the data used in case of our research work is free from the existence of auto correlation.

15. CHOONABHATI TEA ESTATE

From the statistical result revealed from the table in case of Choonabhati Tea Garden it is found that the correlation between productivity and man days used is .993.It indicates a very strong degree of positive correlation between productivity and man days used. It means that greater the man days used higher is the productivity. It further means that higher man days used leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'x' is positive. It means that higher the man days used has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Secondly, from the statistical result revealed from the table it is found that correlation between productivity and social cost is .816.It indicates a strong degree of positive correlation between productivity and social cost. It means that greater the social cost, higher is the productivity. It further means that higher social cost leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'm' is positive. It means that higher the social cost incurred has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Thirdly, it is found that the correlation between productivity and disputes solved through bipartite settlement is .681.It indicates a moderate degree of positive correlation between productivity and number of disputes solved through bipartite settlement. It means that greater the number of disputes solved through bipartite settlement machinery, higher is the productivity. It further means that higher the number of disputes solved leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'w' is positive. It means that higher the number of disputes settled through bipartite machinery has got positive impact on productivity. If we fit a regression line its slope will be left to right upward moving.

Fourthly, it is found that the coefficient of correlation between productivity and number of gate meeting is -.935.It indicates a very high degree of negative correlation between productivity and number of gate meeting .It means that greater the number of gate meeting, lower is the productivity. It further means that higher the number of gate meeting leads towards worse productivity.

From the multiple regression equation it is observed that the value of coefficient of 'z' is negative. It means that higher the number of gate meeting has got negative impact on productivity. If we fit a regression line its slope will be a right to left upward moving.

The result of Durbin Watson Test in case of Choonabhati Tea Estate is 1.93; it proves the data used in case of our research work is free from the existence of auto correlation.

16. KILCOTT TEA GARDEN

From the statistical result revealed from the table in case of Kilcott Tea Garden it is found that the correlation between productivity and man days used is .965.It indicates a very high degree of positive correlation between productivity and man days used. It means that greater the man days used higher is the productivity. It further means that higher man days used leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'x' is positive. It means that higher the man days used has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Secondly, from the statistical result revealed from the table it is found that correlation between productivity and social cost is .945.It indicates a very high degree of positive correlation between productivity and social cost. It means that greater the social cost, higher is the productivity. It further means that higher social cost leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'm' is positive. It means that higher the social cost incurred has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Thirdly, it is found that the correlation between productivity and disputes solved through bipartite settlement is .808.It indicates a high degree of positive correlation between productivity and number of disputes solved through bipartite settlement. It means that greater the number of disputes solved through bipartite settlement machinery, higher is the productivity. It further means that higher the number of disputes solved leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'w' is positive. It means that higher the number of disputes settled through bipartite machinery has got positive impact on productivity. If we fit a regression line its slope will be left to right upward moving.

Fourthly, it is found that the coefficient of correlation between productivity and number of gate meeting is -.930.It indicates a very high degree of negative correlation between productivity and number of gate meeting .It means that greater the number of gate meeting, lower is the productivity. It further means that higher the number of gate meeting leads towards worse productivity.

From the multiple regression equation it is observed that the value of coefficient of 'z' is negative. It means that higher the number of gate meeting has got negative impact on productivity. If we fit a regression line its slope will be a right to left upward moving.

The result of Durbin Watson Test in case of Kilcott Tea Estate is 2.03; it proves the data used in case of our research work is free from the existence of auto correlation.

17. NAGAISUREE TEA ESTATE

From the statistical result revealed from the table in case of Nagaisuree Tea Garden it is found that the correlation between productivity and man days used is .984.It indicates a very high degree of positive correlation between productivity and man days used. It means that greater the man days used higher is the productivity. It further means that higher man days used leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'x' is positive. It means that higher the man days used has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Secondly, from the statistical result revealed from the table it is found that correlation between productivity and social cost is .993.It indicates a very high degree of positive correlation between productivity and social cost. It means that greater the social cost, higher is the productivity. It further means that higher social cost leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'm' is positive. It means that higher the social cost incurred has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Thirdly, it is found that the correlation between productivity and disputes solved through bipartite settlement is .900.It indicates a strong degree of positive correlation between productivity and number of disputes solved through bipartite settlement. It means that greater the number of disputes solved through bipartite settlement machinery, higher is the productivity. It further means that higher the number of disputes solved leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'w' is positive. It means that higher the number of disputes settled through bipartite machinery has got positive impact on productivity. If we fit a regression line its slope will be left to right upward moving.

Fourthly, it is found that the coefficient of correlation between productivity and number of gate meeting is -.916.It indicates a very high degree of negative correlation between productivity and number of gate meeting .It means that greater the number of gate meeting, lower is the productivity. It further means that higher the number of gate meeting leads towards worse productivity.

From the multiple regression equation it is observed that the value of coefficient of 'z' is negative. It means that higher the number of gate meeting has got negative impact on productivity. If we fit a regression line its slope will be a right to left upward moving.

The result of Durbin Watson Test in case of Nagaisuree Tea Estate is 2.07; it proves the data used in case of our research work is free from the existence of auto correlation.

18. BAGRAKOT TEA ESTATE

From the statistical result revealed from the table in case of Bagrakot Tea Garden it is found that the correlation between productivity and man days used is .279.It indicates a low degree of positive correlation between productivity and man days used. It means that greater the man days used higher is the productivity. It further means that higher man days used leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'x' is positive. It means that higher the man days used has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Secondly, from the statistical result revealed from the table it is found that correlation between productivity and social cost is .732.It indicates a moderate degree of positive correlation between productivity and social cost. It means that greater the social cost, higher is the productivity. It further means that higher social cost leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'm' is positive. It means that higher the social cost incurred has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Thirdly, it is found that the correlation between productivity and disputes solved through bipartite settlement is .741.It indicates a moderate degree of positive correlation between productivity and number of disputes solved through bipartite settlement. It means that greater the number of disputes solved through bipartite settlement machinery, higher is the productivity. It further means that higher the number of disputes solved leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'w' is positive. It means that higher the number of disputes settled through bipartite machinery has got positive impact on productivity. If we fit a regression line its slope will be left to right upward moving.

Fourthly, it is found that the coefficient of correlation between productivity and number of gate meeting is -.931.It indicates a very high degree of negative correlation between productivity and number of gate meeting .It means that greater the number of gate meeting, lower is the productivity. It further means that higher the number of gate meeting leads towards worse productivity.

From the multiple regression equation it is observed that the value of coefficient of 'z' is negative. It means that higher the number of gate meeting has got negative impact on productivity. If we fit a regression line its slope will be a right to left upward moving.

The result of Durbin Watson Test in case of Bagrakot Tea Estate is 1.86; it proves the data used in case of our research work is free from the existence of auto correlation.

19. BIRPARA TEA ESTATE

From the statistical result revealed from the table in case of Birpara Tea Garden it is found that the correlation between productivity and man days used is .778.It indicates a very high degree of positive correlation between productivity and man days used. It means that greater the man days used higher is the productivity. It further means that higher man days used leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'x' is positive. It means that higher the man days used has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Secondly, from the statistical result revealed from the table it is found that correlation between productivity and social cost is .982.It indicates a very high degree of positive correlation between productivity and social cost. It means that greater the social cost, higher is the productivity. It further means that higher social cost leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'm' is positive. It means that higher the social cost incurred has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Thirdly, it is found that the correlation between productivity and disputes solved through bipartite settlement is .941.It indicates a very high degree of positive correlation between productivity and number of disputes solved through bipartite settlement. It means that greater the number of disputes solved through bipartite settlement machinery, higher is the productivity. It further means that higher the number of disputes solved leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'w' is positive. It means that higher the number of disputes settled through bipartite machinery has got positive impact on productivity. If we fit a regression line its slope will be left to right upward moving.

Fourthly, it is found that the coefficient of correlation between productivity and number of gate meeting is -.992.It indicates a very strong degree of negative correlation between productivity and number of gate meeting .It means that greater the number of gate meeting, lower is the productivity. It further means that higher the number of gate meeting leads towards worse productivity.

From the multiple regression equation it is observed that the value of coefficient of 'z' is negative. It means that higher the number of gate meeting has got negative impact on productivity. If we fit a regression line its slope will be a right to left upward moving.

The result of Durbin Watson Test in case of Birpara Tea Estate is 2.22; it proves the data used in case of our research work is free from the existence of auto correlation.

20. LANKAPARA TEA ESTATE

From the statistical result revealed from the table in case of Lankapara Tea Garden it is found that the correlation between productivity and man days used is .974.It indicates a very high degree of positive correlation between productivity and man days used. It means that greater the man days used higher is the productivity. It further means that higher man days used leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'x' is positive. It means that higher the man days used has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Secondly, from the statistical result revealed from the table it is found that correlation between productivity and social cost is .994.It indicates a very strong degree of positive correlation between productivity and social cost. It means that greater the social cost, higher is the productivity. It further means that higher social cost leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'm' is positive. It means that higher the social cost incurred has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Thirdly, it is found that the correlation between productivity and disputes solved through bipartite settlement is .870.It indicates a high degree of positive correlation between productivity and number of disputes solved through bipartite settlement. It means that greater the number of disputes solved through bipartite settlement machinery, higher is the productivity. It further means that higher the number of disputes solved leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'w' is positive. It means that higher the number of disputes settled through bipartite machinery has got positive impact on productivity. If we fit a regression line its slope will be left to right upward moving.

Fourthly, it is found that the coefficient of correlation between productivity and number of gate meeting is -.972.It indicates a very strong degree of negative correlation between productivity and number of gate meeting .It means that greater the number of gate meeting, lower is the productivity. It further means that higher the number of gate meeting leads towards worse productivity.

From the multiple regression equation it is observed that the value of coefficient of 'z' is negative. It means that higher the number of gate meeting has got negative impact on productivity. If we fit a regression line its slope will be a right to left upward moving.

The result of Durbin Watson Test in case of Lankapara Tea Estate is 2.04; it proves the data used in case of our research work is free from the existence of auto correlation.

21. RUNGAMUTTEE TEA ESTATE

From the statistical result revealed from the table in case of Rungamuttee Tea Garden it is found that the correlation between productivity and man days used is .990.It indicates a very high degree of positive correlation between productivity and man days used. It means that greater the man days used higher is the productivity. It further means that higher man days used leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'x' is positive. It means that higher the man days used has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Secondly, from the statistical result revealed from the table it is found that correlation between productivity and social cost is .906.It indicates a very high degree of positive correlation between productivity and social cost. It means that greater the social cost, higher is the productivity. It further means that higher social cost leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'm' is positive. It means that higher the social cost incurred has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Thirdly, it is found that the correlation between productivity and disputes solved through bipartite settlement is .911.It indicates a very high degree of positive correlation between productivity and number of disputes solved through bipartite settlement. It means that greater the number of disputes solved through bipartite settlement machinery, higher is the productivity. It further means that higher the number of disputes solved leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'w' is positive. It means that higher the number of disputes settled through bipartite machinery has got positive impact on productivity. If we fit a regression line its slope will be left to right upward moving.

Fourthly, it is found that the coefficient of correlation between productivity and number of gate meeting is -.872.It indicates a high degree of negative correlation between productivity and number of gate meeting .It means that greater the number of gate meeting, lower is the productivity. It further means that higher the number of gate meeting leads towards worse productivity.

From the multiple regression equation it is observed that the value of coefficient of 'z' is negative. It means that higher the number of gate meeting has got negative impact on productivity. If we fit a regression line its slope will be a right to left upward moving.

The result of Durbin Watson Test in case of Rungamuttee Tea Estate is 2.08; it proves the data used in case of our research work is free from the existence of auto correlation.

22. DAMDIM TEA ESTATE

From the statistical result revealed from the table in case of Damdim Garden it is found that the correlation between productivity and man days used is .930.It indicates a very high degree of positive correlation between productivity and man days used. It means that greater the man days used higher is the productivity. It further means that higher man days used leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'x' is positive. It means that higher the man days used has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Secondly, from the statistical result revealed from the table it is found that correlation between productivity and social cost is .491.It indicates a moderate degree of positive correlation between productivity and social cost. It means that greater the social cost, higher is the productivity. It further means that higher social cost leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'm' is positive. It means that higher the social cost incurred has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Thirdly, it is found that the correlation between productivity and disputes solved through bipartite settlement is .606.It indicates a strong degree of positive correlation between productivity and number of disputes solved through bipartite settlement. It means that greater the number of disputes solved through bipartite settlement machinery, higher is the productivity. It further means that higher the number of disputes solved leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'w' is positive. It means that higher the number of disputes settled through bipartite machinery has got positive impact on productivity. If we fit a regression line its slope will be left to right upward moving.

Fourthly, it is found that the coefficient of correlation between productivity and number of gate meeting is -.983.It indicates a very high degree of negative correlation between productivity and number of gate meeting .It means that greater the number of gate meeting, lower is the productivity. It further means that higher the number of gate meeting leads towards worse productivity.

From the multiple regression equation it is observed that the value of coefficient of 'z' is negative. It means that higher the number of gate meeting has got negative impact on productivity. If we fit a regression line its slope will be a right to left upward moving.

The result of Durbin Watson Test in case of Damdim Tea Estate is 1.95; it proves the data used in case of our research work is free from the existence of auto correlation.

23. BATABARI TEA ESTATE

From the statistical result revealed from the table in case of DamdimTea Garden it is found that the correlation between productivity and man days used is .056.It indicates a very low degree of positive correlation between productivity and man days used. It means that greater the man days used higher is the productivity. It further means that higher man days used leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'x' is positive. It means that higher the man days used has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Secondly, from the statistical result revealed from the table it is found that correlation between productivity and social cost is .653.It indicates a high degree of positive correlation between productivity and social cost. It means that greater the social cost, higher is the productivity. It further means that higher social cost leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'm' is positive. It means that higher the social cost incurred has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Thirdly, it is found that the correlation between productivity and disputes solved through bipartite settlement is .943.It indicates a very high degree of positive correlation between productivity and number of disputes solved through bipartite settlement. It means that greater the number of disputes solved through bipartite settlement machinery, higher is the productivity. It further means that higher the number of disputes solved leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'w' is positive. It means that higher the number of disputes settled through bipartite machinery has got positive impact on productivity. If we fit a regression line its slope will be left to right upward moving.

Fourthly, it is found that the coefficient of correlation between productivity and number of gate meeting is -.887.It indicates a high degree of negative correlation between productivity and number of gate meeting .It means that greater the number of gate meeting, lower is the productivity. It further means that higher the number of gate meeting leads towards worse productivity.

From the multiple regression equation it is observed that the value of coefficient of 'z' is negative. It means that higher the number of gate meeting has got negative impact on productivity. If we fit a regression line its slope will be a right to left upward moving.

The result of Durbin Watson Test in case of Batabari Tea Estate is 1.93; it proves the data used in case of our research work is free from the existence of auto correlation.

24. NEORANUDDY TEA ESTATE

From the statistical result revealed from the table in case of Neoranuddy Tea Garden it is found that the correlation between productivity and man days used is .195.It indicates a low degree of positive correlation between productivity and man days used. It means that greater the man days used higher is the productivity. It further means that higher man days used leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'x' is positive. It means that higher the man days used has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Secondly, from the statistical result revealed from the table it is found that correlation between productivity and social cost is .896.It indicates a very high degree of positive correlation between productivity and social cost. It means that greater the social cost, higher is the productivity. It further means that higher social cost leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'm' is positive. It means that higher the social cost incurred has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Thirdly, it is found that the correlation between productivity and disputes solved through bipartite settlement is .890.It indicates a very high degree of positive correlation between productivity and number of disputes solved through bipartite settlement. It means that greater the number of disputes solved through bipartite settlement machinery, higher is the productivity. It further means that higher the number of disputes solved leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'w' is positive. It means that higher the number of disputes settled through bipartite machinery has got positive impact on productivity. If we fit a regression line its slope will be left to right upward moving.

Fourthly, it is found that the coefficient of correlation between productivity and number of gate meeting is -.708.It indicates a moderate degree of negative correlation between productivity and number of gate meeting .It means that greater the number of gate meeting, lower is the productivity. It further means that higher the number of gate meeting leads towards worse productivity.

From the multiple regression equation it is observed that the value of coefficient of 'z' is negative. It means that higher the number of gate meeting has got negative impact on productivity. If we fit a regression line its slope will be a right to left upward moving.

The result of Durbin Watson Test in case of Neoranuddy Tea Estate is 1.98; it proves the data used in case of our research work is free from the existence of auto correlation.

25. TOTAPARA TEA ESTATE

From the statistical result revealed from the table in case of Totapara Tea Garden it is found that the correlation between productivity and man days used is .989.It indicates a very high degree of positive correlation between productivity and man days used. It means that greater the man days used higher is the productivity. It further means that higher man days used leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'x' is positive. It means that higher the man days used has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Secondly, from the statistical result revealed from the table it is found that correlation between productivity and social cost is .998.It indicates a very high degree of positive correlation between productivity and social cost. It means that greater the social cost, higher is the productivity. It further means that higher social cost leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'm' is positive. It means that higher the social cost incurred has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Thirdly, it is found that the correlation between productivity and disputes solved through bipartite settlement is .895.It indicates a strong degree of positive correlation between productivity and number of disputes solved through bipartite settlement. It means that greater the number of disputes solved through bipartite settlement machinery, higher is the productivity. It further means that higher the number of disputes solved leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'w' is positive. It means that higher the number of disputes settled through bipartite machinery has got positive impact on productivity. If we fit a regression line its slope will be left to right upward moving.

Fourthly, it is found that the coefficient of correlation between productivity and number of gate meeting is -.809.It indicates a strong degree of negative correlation between productivity and number of gate meeting .It means that greater the number of gate meeting, lower is the productivity. It further means that higher the number of gate meeting leads towards worse productivity.

From the multiple regression equation it is observed that the value of coefficient of 'z' is negative. It means that higher the number of gate meeting has got negative impact on productivity. If we fit a regression line its slope will be a right to left upward moving.

The result of Durbin Watson Test in case of Totapara Tea Estate is 1.96; it proves the data used in case of our research work is free from the existence of auto correlation.

26. ETHELBARI TEA ESTATE

From the statistical result revealed from the table in case of Totapara Tea Garden it is found that the correlation between productivity and man days used is .997.It indicates a very high degree of positive correlation between productivity and man days used. It means that greater the man days used higher is the productivity. It further means that higher man days used leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'x' is positive. It means that higher the man days used has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Secondly, from the statistical result revealed from the table it is found that correlation between productivity and social cost is .989.It indicates a very strong degree of positive correlation between productivity and social cost. It means that greater the social cost, higher is the productivity. It further means that higher social cost leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'm' is positive. It means that higher the social cost incurred has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Thirdly, it is found that the correlation between productivity and disputes solved through bipartite settlement is .810.It indicates a strong degree of positive correlation between productivity and number of disputes solved through bipartite settlement. It means that greater the number of disputes solved through bipartite settlement machinery, higher is the productivity. It further means that higher the number of disputes solved leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'w' is positive. It means that higher the number of disputes settled through bipartite machinery has got positive impact on productivity. If we fit a regression line its slope will be left to right upward moving.

Fourthly, it is found that the coefficient of correlation between productivity and number of gate meeting is -.696.It indicates a moderate degree of negative correlation between productivity and number of gate meeting .It means that greater the number of gate meeting, lower is the productivity. It further means that higher the number of gate meeting leads towards worse productivity.

From the multiple regression equation it is observed that the value of coefficient of 'z' is negative. It means that higher the number of gate meeting has got negative impact on productivity. If we fit a regression line its slope will be a right to left upward moving.

The result of Durbin Watson Test in case of Ethelbari Tea Estate is 1.97; it proves the data used in case of our research work is free from the existence of auto correlation.

27. BAINTGOORIE TEA ESTATE

From the statistical result revealed from the table in case of Totapara Tea Garden it is found that the correlation between productivity and man days used is .951.It indicates a very high degree of positive correlation between productivity and man days used. It means that greater the man days used higher is the productivity. It further means that higher man days used leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'x' is positive. It means that higher the man days used has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Secondly, from the statistical result revealed from the table it is found that correlation between productivity and social cost is.978.It indicates a very high degree of positive correlation between productivity and social cost. It means that greater the social cost, higher is the productivity. It further means that higher social cost leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'm' is positive. It means that higher the social cost incurred has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Thirdly, it is found that the correlation between productivity and disputes solved through bipartite settlement is .866.It indicates a strong degree of positive correlation between productivity and number of disputes solved through bipartite settlement. It means that greater the number of disputes solved through bipartite settlement machinery, higher is the productivity. It further means that higher the number of disputes solved leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'w' is positive. It means that higher the number of disputes settled through bipartite machinery has got positive impact on productivity. If we fit a regression line its slope will be left to right upward moving.

Fourthly, it is found that the coefficient of correlation between productivity and number of gate meeting is -.942.It indicates a very strong degree of negative correlation between productivity and number of gate meeting .It means that greater the number of gate meeting, lower is the productivity. It further means that higher the number of gate meeting leads towards worse productivity.

From the multiple regression equation it is observed that the value of coefficient of 'z' is negative. It means that higher the number of gate meeting has got negative impact on productivity. If we fit a regression line its slope will be a right to left upward moving.

The result of Durbin Watson Test in case of Baintgoorie Tea Estate is 1.99; it proves the data used in case of our research work is free from the existence of auto correlation.

28. KUMARGRAM TEA ESTATE

From the statistical result revealed from the table in case of Totapara Tea Garden it is found that the correlation between productivity and man days used is .955.It indicates a very strong degree of positive correlation between productivity and man days used. It means that greater the man days used higher is the productivity. It further means that higher man days used leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'x' is positive. It means that higher the man days used has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Secondly, from the statistical result revealed from the table it is found that correlation between productivity and social cost is .961.It indicates a very high degree of positive correlation between productivity and social cost. It means that greater the social cost, higher is the productivity. It further means that higher social cost leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'm' is positive. It means that higher the social cost incurred has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Thirdly, it is found that the correlation between productivity and disputes solved through bipartite settlement is .989.It indicates a very high degree of positive correlation between productivity and number of disputes solved through bipartite settlement. It means that greater the number of disputes solved through bipartite settlement machinery, higher is the productivity. It further means that higher the number of disputes solved leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'w' is positive. It means that higher the number of disputes settled through bipartite machinery has got positive impact on productivity. If we fit a regression line its slope will be left to right upward moving.

Fourthly, it is found that the coefficient of correlation between productivity and number of gate meeting is -.926.It indicates a very strong degree of negative correlation between productivity and number of gate meeting .It means that greater the number of gate meeting, lower is the productivity. It further means that higher the number of gate meeting leads towards worse productivity.

From the multiple regression equation it is observed that the value of coefficient of 'z' is negative. It means that higher the number of gate meeting has got negative impact on productivity. If we fit a regression line its slope will be a right to left upward moving.

The result of Durbin Watson Test in case of Kumargram Tea Estate is 1.96; it proves the data used in case of our research work is free from the existence of auto correlation.

29. MATELLI TEA ESTATE

From the statistical result revealed from the table in case of Totapara Tea Garden it is found that the correlation between productivity and man days used is .930.It indicates a very high degree of positive correlation between productivity and man days used. It means that greater the man days used higher is the productivity. It further means that higher man days used leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'x' is positive. It means that higher the man days used has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Secondly, from the statistical result revealed from the table it is found that correlation between productivity and social cost is .797.It indicates a strong degree of positive correlation between productivity and social cost. It means that greater the social cost, higher is the productivity. It further means that higher social cost leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'm' is positive. It means that higher the social cost incurred has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Thirdly, it is found that the correlation between productivity and disputes solved through bipartite settlement is .892.It indicates a strong degree of positive correlation between productivity and number of disputes solved through bipartite settlement. It means that greater the number of disputes solved through bipartite settlement machinery, higher is the productivity. It further means that higher the number of disputes solved leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'w' is positive. It means that higher the number of disputes settled through bipartite machinery has got positive impact on productivity. If we fit a regression line its slope will be left to right upward moving.

Fourthly, it is found that the coefficient of correlation between productivity and number of gate meeting is -.938.It indicates a very strong degree of negative correlation between productivity and number of gate meeting .It means that greater the number of gate meeting, lower is the productivity. It further means that higher the number of gate meeting leads towards worse productivity.

From the multiple regression equation it is observed that the value of coefficient of 'z' is negative. It means that higher the number of gate meeting has got negative impact on productivity. If we fit a regression line its slope will be a right to left upward moving.

The result of Durbin Watson Test in case of Matelli Tea Estate is 1.92; it proves the data used in case of our research work is free from the existence of auto correlation.

30. KURTI TEA ESTATE

From the statistical result revealed from the table in case of Totapara Tea Garden it is found that the correlation between productivity and man days used is .748. It indicates a strong degree of positive correlation between productivity and man days used. It means that greater the man days used higher is the productivity. It further means that higher man days used leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'x' is positive. It means that higher the man days used has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Secondly, from the statistical result revealed from the table it is found that correlation between productivity and social cost is .828.It indicates a high degree of positive correlation between productivity and social cost. It means that greater the social cost, higher is the productivity. It further means that higher social cost leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'm' is positive. It means that higher the social cost incurred has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

Thirdly, it is found that the correlation between productivity and disputes solved through bipartite settlement is .924.It indicates a very high degree of positive correlation between productivity and number of disputes solved through bipartite settlement. It means that greater the number of disputes solved through bipartite settlement machinery, higher is the productivity. It further means that higher the number of disputes solved leads towards better productivity.

From the multiple regression equation it is observed that the value of coefficient of 'w' is positive. It means that higher the number of disputes settled through bipartite machinery has got positive impact on productivity. If we fit a regression line its slope will be left to right upward moving.

Fourthly, it is found that the coefficient of correlation between productivity and number of gate meeting is -.837.It indicates a strong degree of negative correlation between productivity and number of gate meeting .It means that greater the number of gate meeting, lower is the productivity. It further means that higher the number of gate meeting leads towards worse productivity.

From the multiple regression equation it is observed that the value of coefficient of 'z' is negative. It means that higher the number of gate meeting has got negative impact on productivity. If we fit a regression line its slope will be a right to left upward moving.

The result of Durbin Watson Test in case of Kurti Tea Estate is 1.95; it proves the data used in case of our research work is free from the existence of auto correlation.

6.3: Garden wise Interpretation

It is observed from the above table that there is a highly positive correlation between productivity and man days used in the gardens like Washabari, Beach, Chulsa, Aibheel, Banarhat, Karbala, Hilla, Choonabhati, Kilcott, Nagaisuri, Birpara, Lankapara, Rungamuttee, Damdim, Totapara, Ethelbari, Baintgoorie, Kumargram, Matelli and Kurti. It indicates that productivity is highly dependent on the total number of man days used. In case of the gardens like Madhu, Dima, Bagrakot and Neoranuddy, productivity is also moderately related with man days used. In case of very few tea gardens like Kadambini, Gandrapara, Jiti, Hope, Newdooars and Batabari, there is very low positive correlation between productivity and man days used. So, it can be concluded that there is a direct linkage between the total quantum of man days used with the productivity of that particular garden.

So, it is suggested that for increasing productivity, management should try to increase as much as use of total quantum of man days used in the particular gardens.

It is observed from the above table that there is a highly positive correlation between productivity and social cost incurred in the gardens like Washabari, Kadambini, Beach, Chulsa, Aibheel, Gandrapara, Jiti, Hope, Banarhat, Karbala, Kilcott, Choonabhati, Nagaisuri, Birpara, Lankapara, Rungamuttee, Neoranuddy, Totapara, Ethelbari, Baintgoorie, Kumargram and Kurti. It indicates that productivity is highly dependent on social cost incurred. In case of the gardens like Madhu, Dima, Hilla, Newdooars, Kilcott, Bagrakot, Damdim, Batabari and Kurti, productivity is also moderately related with the social cost incurred. So, it can be concluded that there is a direct linkage between the total social costs incurred with the productivity of the particular gardens.

So, it is suggested that for increasing productivity management should try to increase as much as possible the social cost in the particular gardens.

It is observed from the above table that there is a highly positive correlation between productivity and bipartite settlement of industrial disputes in the gardens like Washabari, Kadambini, Beach, Aibheel, Gandrapara, Hope, Karbala, Hilla, Kilcott, Nagaisuri, Birpara, Lankapara, Rungamuttee, Batabari, Neoranuddy, Totapara, Ethelbari, Baintgoorie, Kumargram, Matelli and Kurti. It indicates that productivity is highly dependent on number of

bipartite settlement of industrial disputes. In case of the gardens like Madhu, Dima, Chulsa, Jiti, Banarhat, Newdooars, Choonabhati, Bagrakot and Damdim, productivity is also moderately related with the number of bipartite settlement of industrial disputes.

So, it can be concluded that there is a direct linkage between the numbers of bipartite settlement with the productivity of the particular gardens.

So, it is suggested that for increasing productivity industrial disputes should be solved through bipartite settlement machinery rather than tripartite settlement machinery to increase the productivity of the particular gardens.

It is observed from the above table that there is a highly negative correlation between productivity and number of gate meeting in the gardens like Washabari, Kadambini, Dima, Beach, Chulsa, Aibheel, Gandrapara, Jiti, Hope, Banarhat, Karbala, Hilla, Choonabhati, Kilcott, Nagaisuri, Bagrakot, Birpara, Lankapara, Rungamuttee, Damdim, Batabari, Totapara, Baintgoorie, Kumargram, Matelli and Kurti. It indicates that productivity is highly dependent on total number of gate meeting. In case of the gardens like Madhu, Newdooars, Neoranuddy and Ethelbari, productivity is also moderately negatively related with the number of gate meeting. So, it can be concluded that there is a direct linkage between the numbers of gate meeting with the productivity of the particular gardens. So, it is suggested that for increasing productivity management should try to decrease the number of gate meeting in the particular gardens.

From the multiple regression equation it is observed that the value of coefficient of 'x' is positive in the gardens like Washabari, Madhu, Kadambini, Dima, Beach, Chulsa, Aibheel, Gandrapara, Jiti, Hope, Banarhat, Karbala, Hilla, Newdooars, Choonabhati, Kilcott, Nagaisuri, Bagrakot, Birpara, Lankapara, Rungamuttee, Damdim, Batabari, Neoranuddy ,Totapara, Ethelbari, Baintgoorie, Kumargram, Matelli and Kurti. It indicates that productivity is highly dependent on total number of man days used. In case of the gardens like Washabari, Madhu, Kadambini, Dima, Beach, Chulsa, Aibheel, Gandrapara, Jiti, Hope, Banarhat, Karbala, Hilla, Newdooars, Choonabhati, Kilcott, Nagaisuri, Bagrakot, Birpara, Lankapara, Rungamuttee, Damdim, Batabari, Neoranuddy ,Totapara, Ethelbari, Baintgoorie, Kumargram, Matelli and Kurti, productivity is also moderately related with man days used.

So, it can be concluded that there is a direct linkage between the total quantum of man days used with the productivity of the particular gardens. So, it is suggested that for increasing productivity, management should try to increase as much as use of total quantum of man days used in the particular gardens. It means that higher the man days used has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

From the multiple regression equation it is observed that the value of coefficient of 'm' is positive in the gardens likeWashabari, Madhu, Kadambini, Dima, Beach, Chulsa, Aibheel, Gandrapara, Jiti, Hope, Banarhat, Karbala, Hilla, Newdooars, Choonabhati, Kilcott, Nagaisuri, Bagrakot, Birpara, Lankapara, Rungamuttee, Damdim, Batabari, NeoraNuddy, Totapara, Ethelbari, Baintgoorie, Kumargram,Matelli and Kurti.

It indicates that productivity is highly dependent on the social cost incurred. In case of the gardens like Washabari, Madhu, Kadambini, Dima, Beach, Chulsa, Aibheel, Gandrapara, Jiti,Hope, Banarhat, Karbala, Hilla, Newdooars, Choonabhati, Kilcott Nagaisuri, Bagrakot, Birpara, Lankapara, Rungamuttee, Damdim, Batabari, Neoranuddy, Totapara, Ethelbari, Baintgoorie, Kumargram, Matelli and Kurti, productivity is also moderately related with the social cost incurred. So, it can be concluded that there is a direct linkage between the total social costs incurred with the productivity of the particular gardens. So, it is suggested that for increasing productivity management should try to increase as much as possible the social cost in that particular gardens. It means that higher the social cost incurred has got positive impact on productivity. If we fit a regression line its slope will be a left to right upward moving.

From the multiple regression equation it is observed that the value of coefficient of 'w' is positive in the gardens like Washabari, Madhu, Kadambini, Dima, Beach, Chulsa, Aibheel, Gandrapara, Jiti, Hope, Banarhat, Karbala, Hilla, Newdooars, Choonabhati, Kilcott, Nagaisuri, Bagrakot, Birpara, Lankapara, Rungamuttee, Damdim, Batabari, Neoranuddy, Totapara, Ethelbari, Baintgoorie, Kumargram, Matelli and Kurti. It indicates that productivity is highly dependent on number of bipartite settlement of industrial disputes. In case of the gardens like Washabari, Madhu, Kadambini, Dima, Beach, Chulsa, Aibheel, Gandrapara, Jiti, Hope, Banarhat, Karbala, Hilla, Newdooars, Choonabhati, Kilcott, Nagaisuri, Bagrakot, Birpara, Lankapara, Rungamuttee, Damdim, Batabari, Neoranuddy, Totapara, Ethelbari, Baintgoorie, Kumargram, Matelli and Kurti, productivity is also moderately related with the number of bipartite settlement of industrial disputes.

So, it can be concluded that there is a direct linkage between the numbers of bipartite settlement with the productivity of the particular gardens.

So, it is suggested that for increasing productivity industrial disputes should be solved through bipartite settlement machinery rather than tripartite settlement machinery to increase the productivity of the particular gardens. It means that higher the number of disputes settled through bipartite machinery has got positive impact on productivity. If we fit a regression line its slope will be left to right upward moving.

From the multiple regression equation it is observed that the value of coefficient of 'z' is negative in the gardens like Washabari ,Madhu ,Kadambini, Dima, Beach, Chulsa, Aibheel,

Gandrapara, Jiti, Hope, Banarhat, Karbala, Hilla, Newdooars, Choonabhati, Kilcott, Nagaisuri, Bagrakot, Birpara, Lankapara, Rungamuttee, Damdim, Batabari, Neoranuddy, Totapara, Ethelbari, Baintgoorie, Kumargram, Matelli and Kurti. It indicates that productivity is highly dependent on total number of gate meeting. In case of the gardens like Washabari, Madhu, Kadambini, Dima, Beach, Chulsa, Aibheel, Gandrapara, Jiti, Hope, Banarhat, Karbala, Hilla, Newdooars, Choonabhati, Kilcott, Nagaisuri, Bagrakot, Birpara, Lankapara, Rungamuttee, Damdim, Batabari, Neoranuddy, Totapara, Ethelbari, Baintgoorie, Kumargram, Matelli and Kurti, productivity is also moderately negatively related with the number of gate meeting.

So, it can be concluded that there is a direct linkage between the numbers of gate meeting with the productivity of that particular garden.

So, it is suggested that for increasing productivity, management should try to decrease the number of gate meeting in the particular gardens. It means that higher the number of gate meeting has got negative impact on productivity.

If we fit a regression line its slope will be a right to left upward moving. All the regression lines of sample tea gardens are depicted below.

1. Washabari Tea Garden

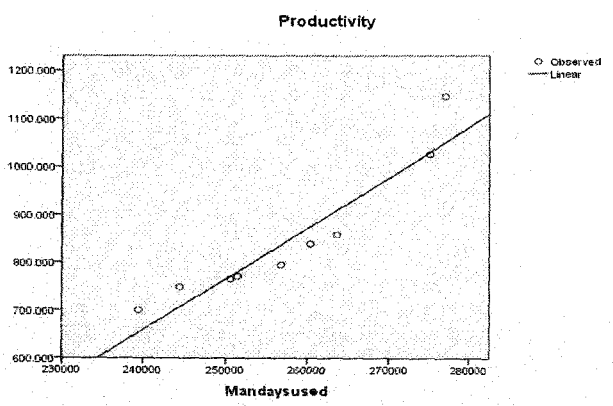


Diagram No-6.1

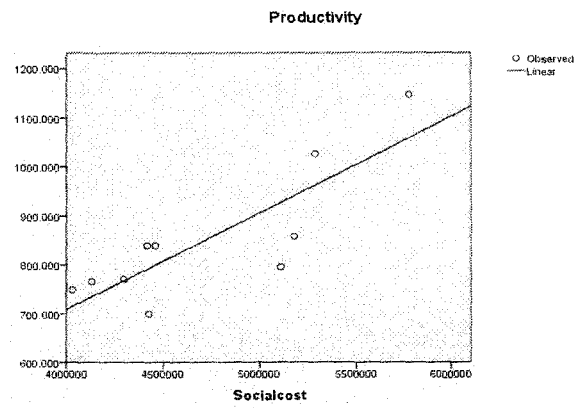


Diagram No-6.2

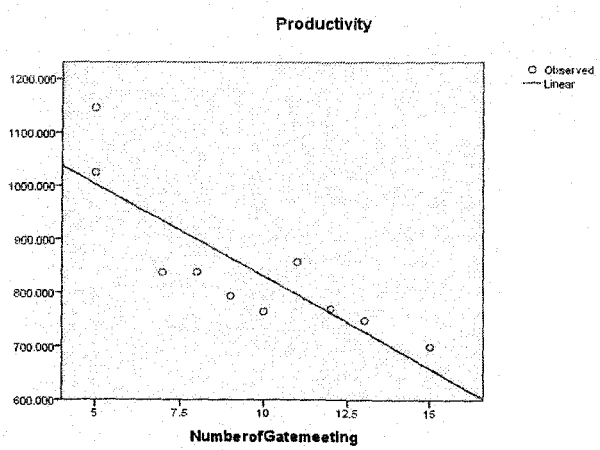


Diagram No-6.3

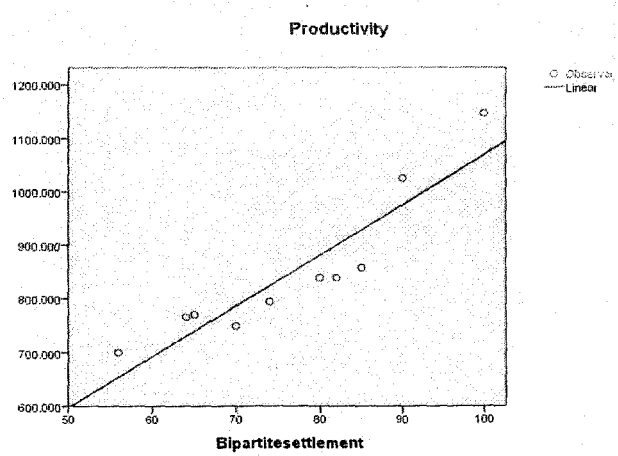


Diagram No-6.4

2. Madhu Tea Estate

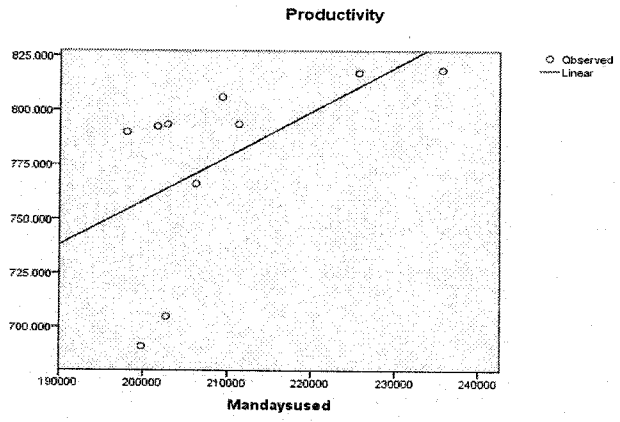


Diagram No-6.5

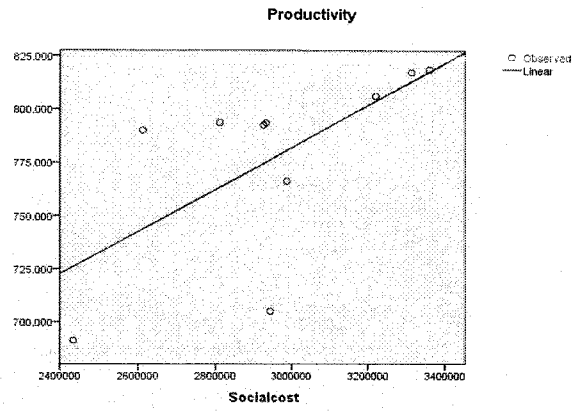


Diagram No-6.6

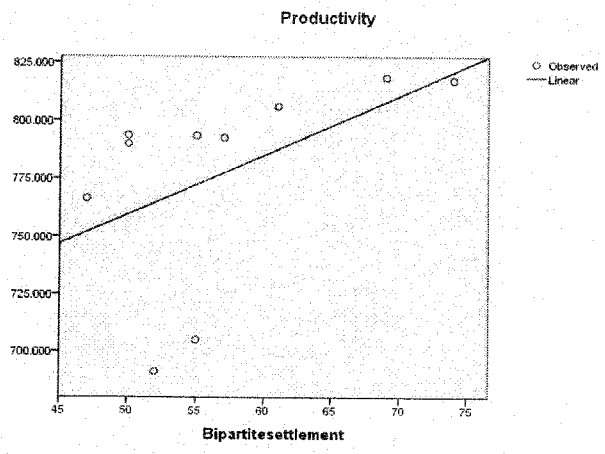


Diagram No-6.7

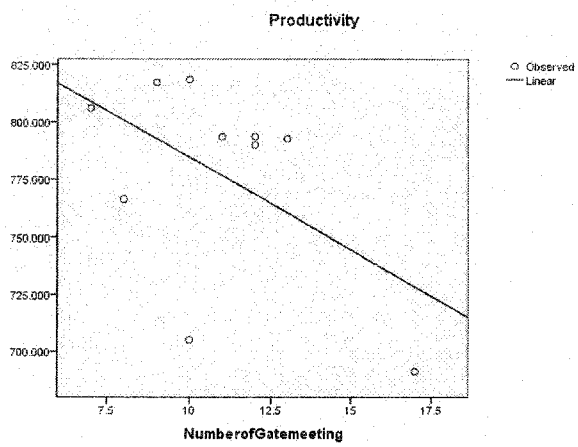


Diagram No-6.8

3. Kadambini Tea Estate

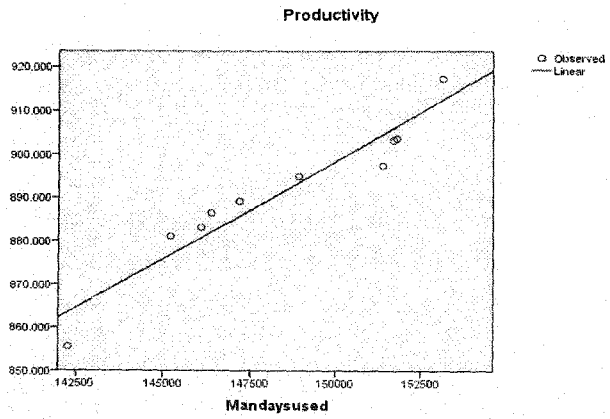


Diagram No-6.9

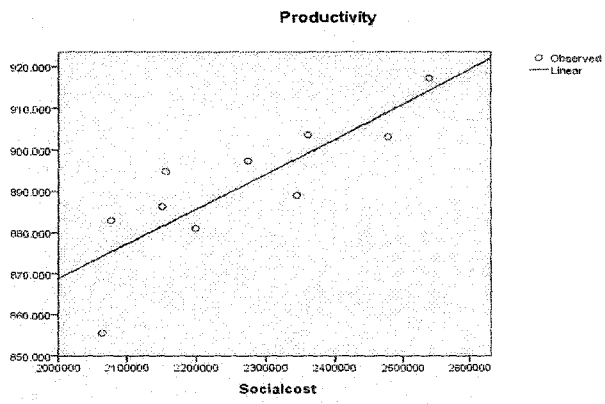


Diagram No-6.10

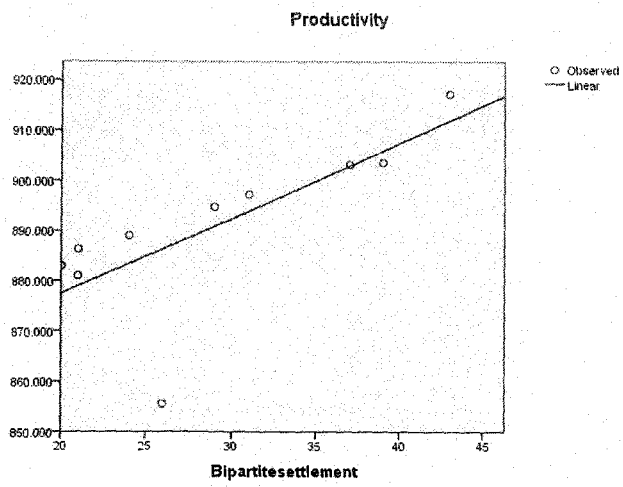


Diagram No-6.11

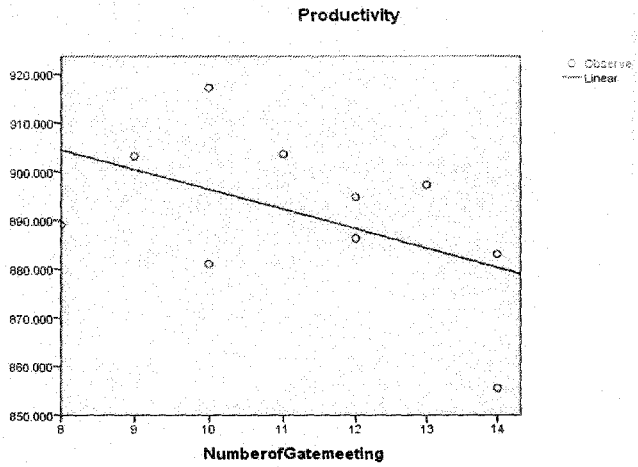


Diagram No-6.12

4. Dima Tea Estate

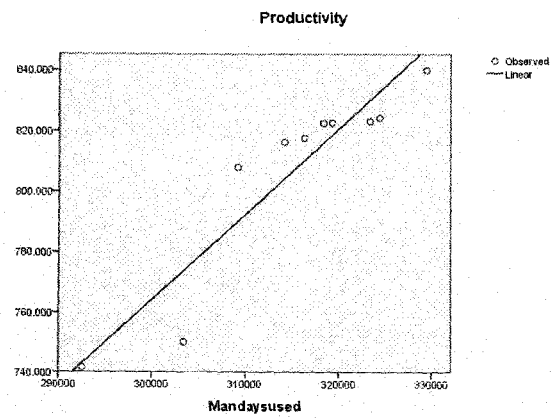


Diagram No-6.13

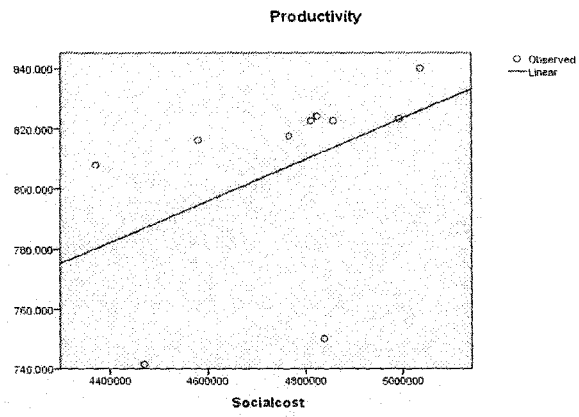


Diagram No-6.14

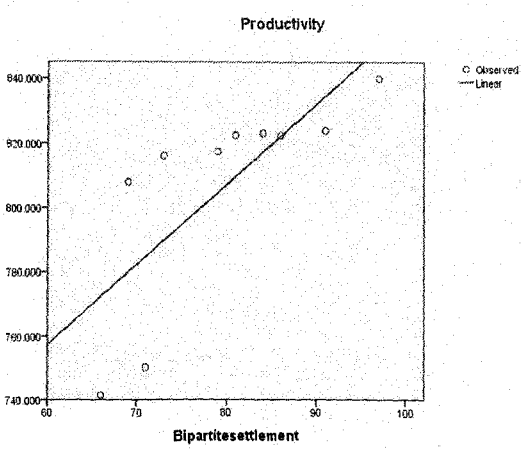


Diagram No-6.15

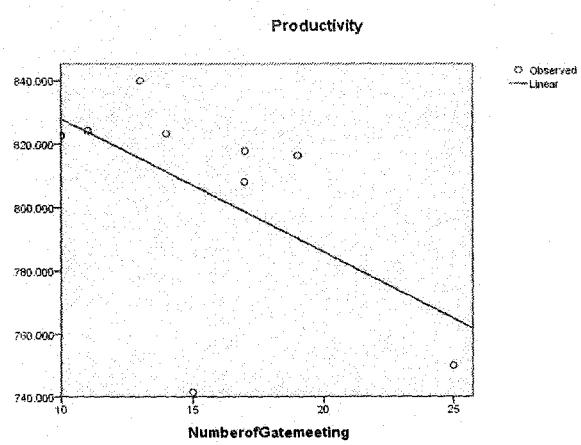


Diagram No-6.16

5. Beach Tea Estate

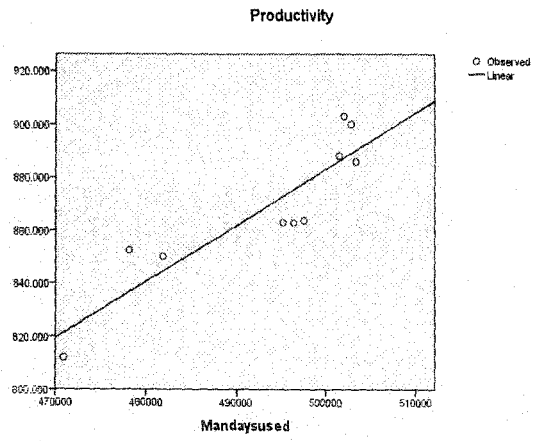


Diagram No-6.17

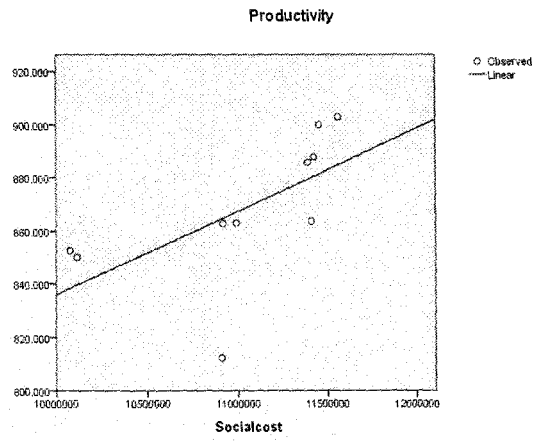


Diagram No-6.18

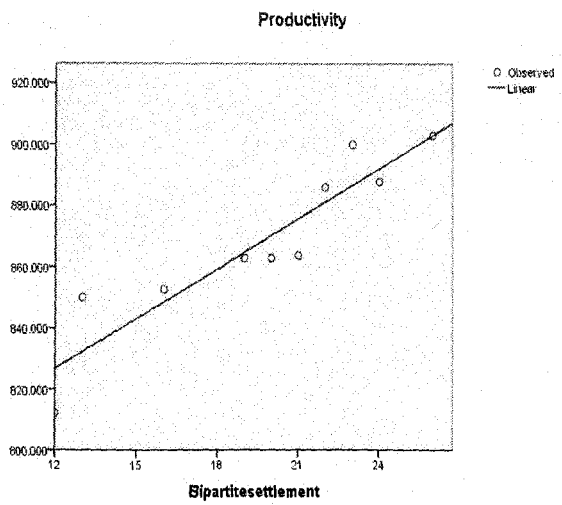


Diagram No-6.19

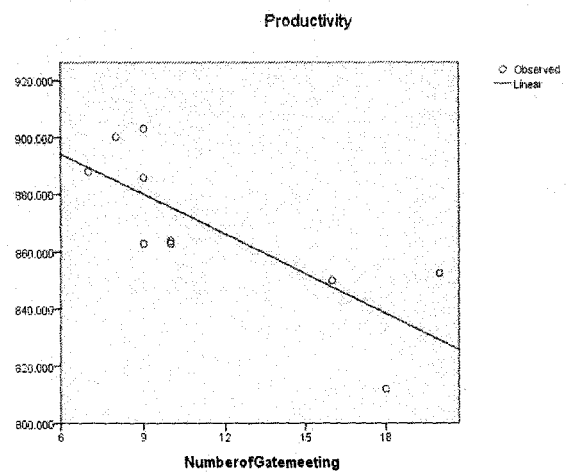


Diagram No-6.20

6. Chulsa Tea Estate

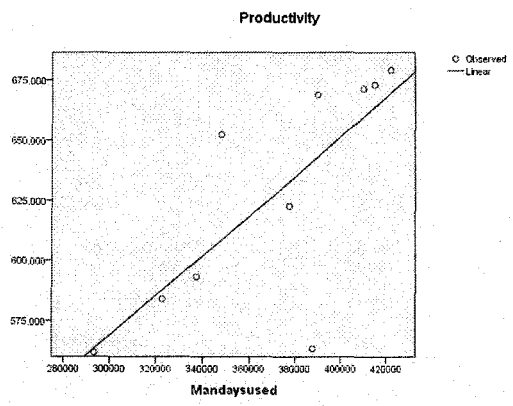


Diagram No-6.21

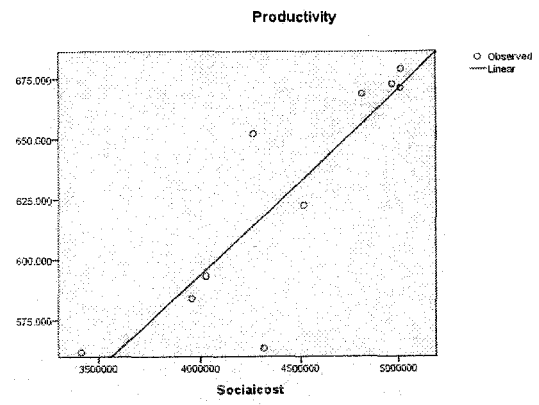


Diagram No-6.22

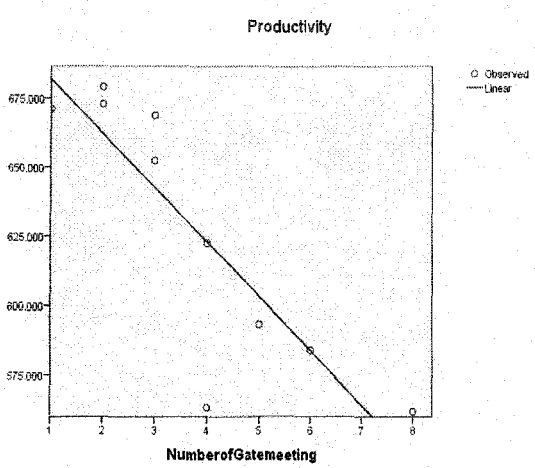


Diagram No-6.23

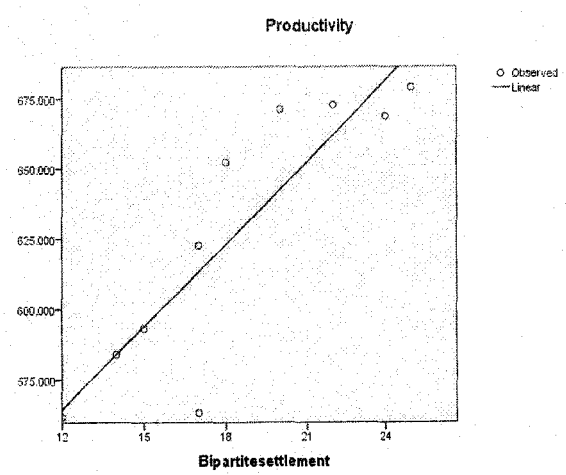


Diagram No-6.24

7. Aibhell Tea Estate

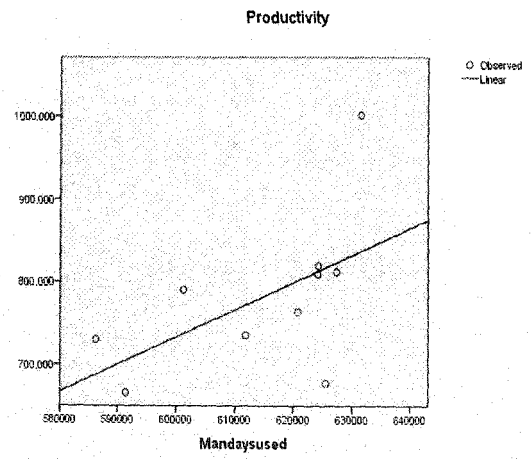
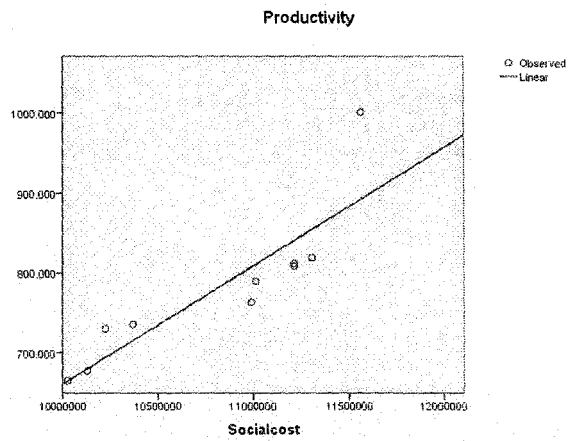


Diagram No-6.25



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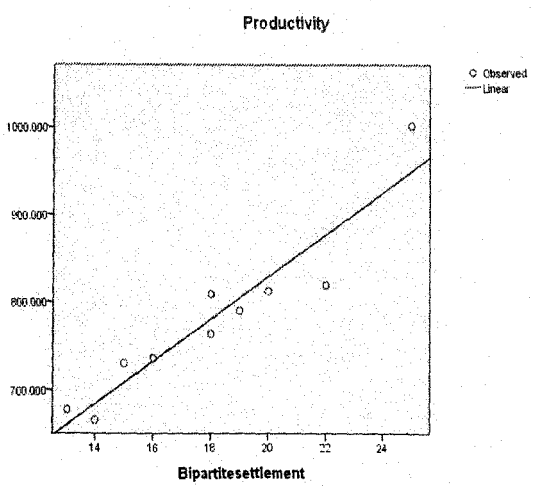


Diagram No-6.27

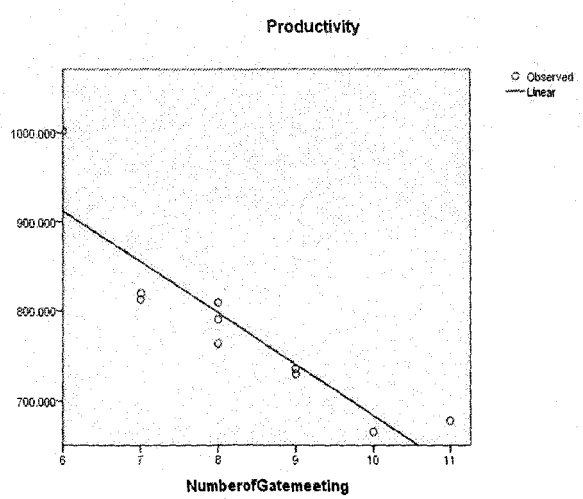
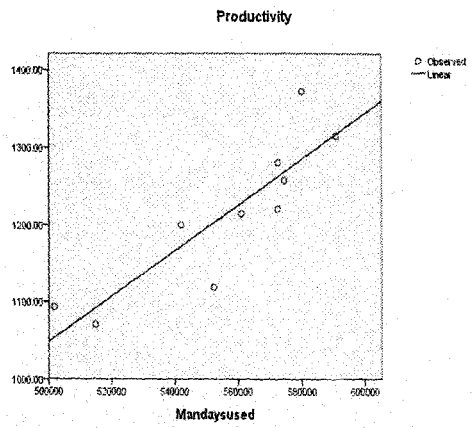


Diagram No-6.28

8. Gandrapara Tea Estate



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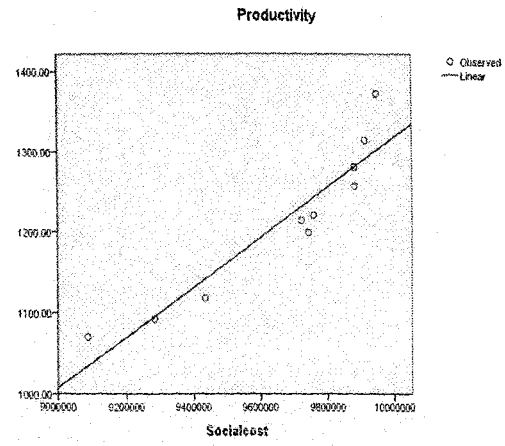


Diagram No-6.30

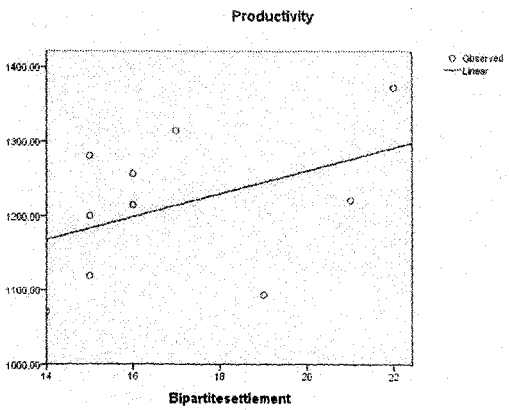


Diagram No-6.31

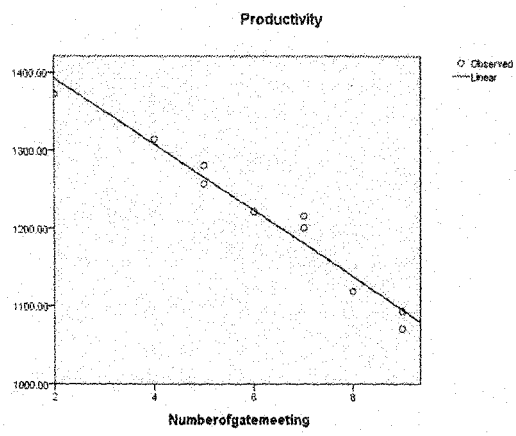
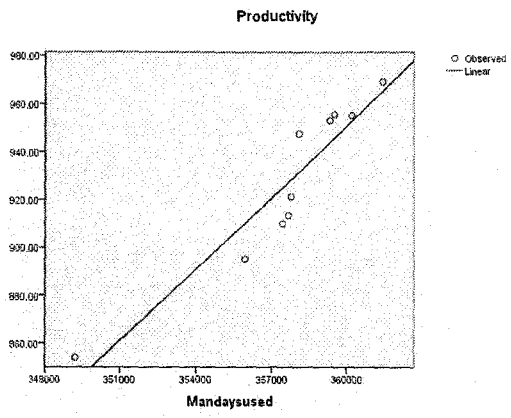


Diagram No-6.32

9. Jiti Tea Garden



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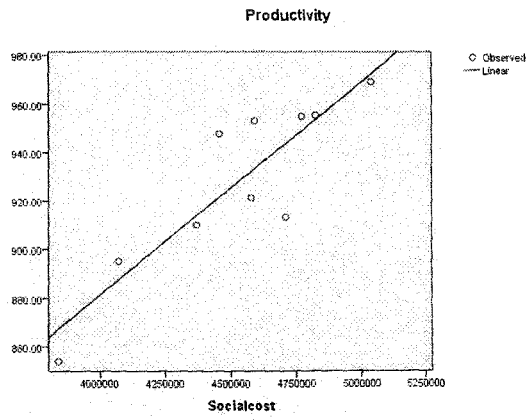

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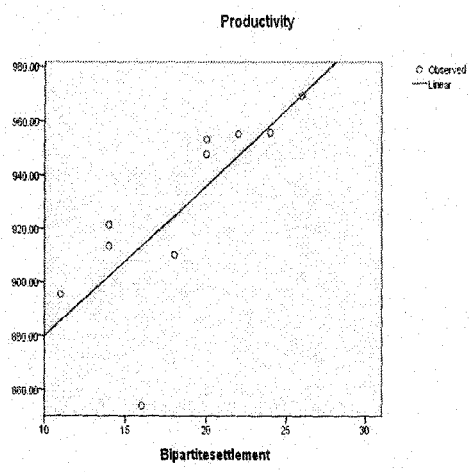

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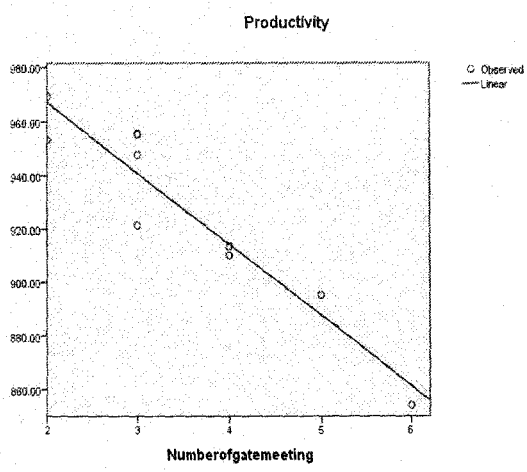


Diagram No-6.36

10. Hope tea Estate

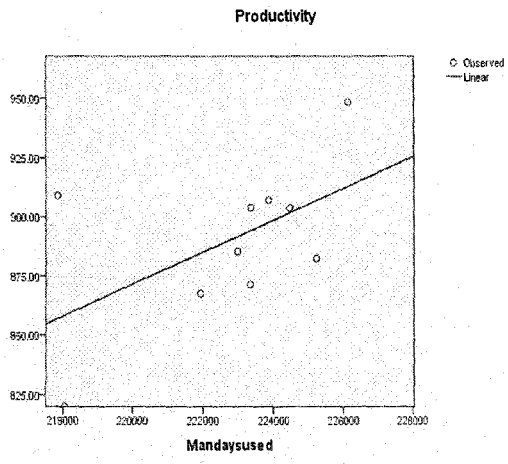
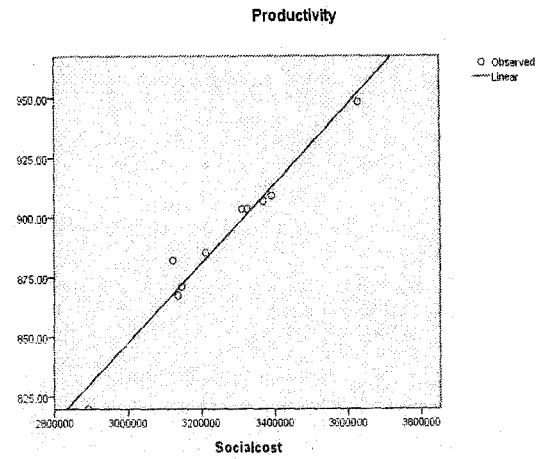


Diagram No-6.37



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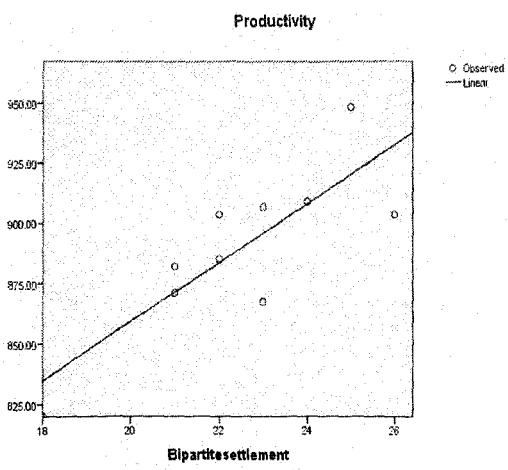

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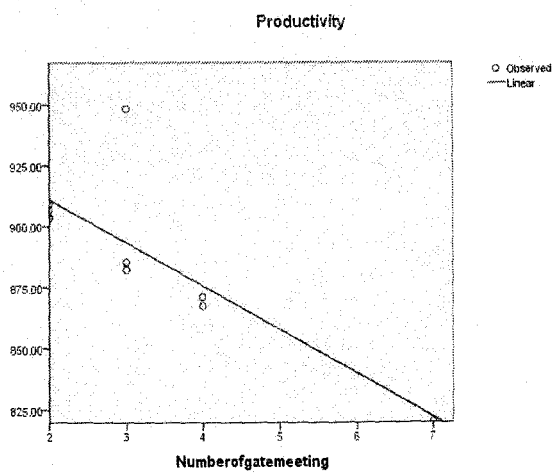
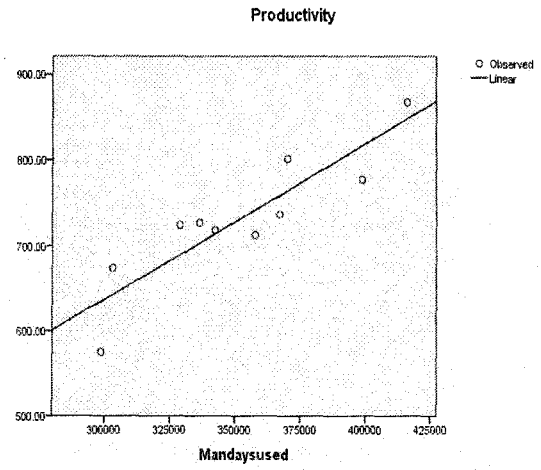


Diagram No-6.40

11. Banarhat Tea Garden



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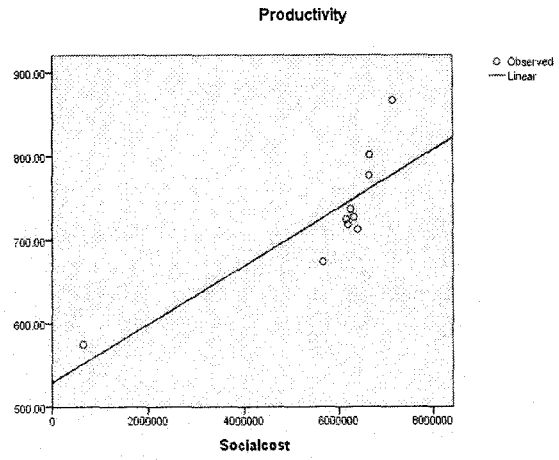


Diagram No-6.42

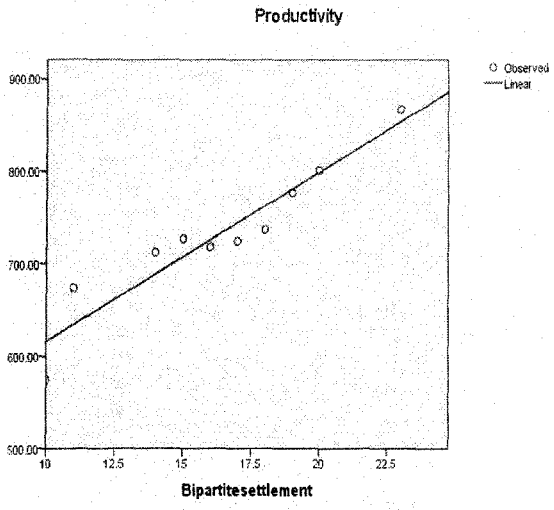


Diagram No-6.43

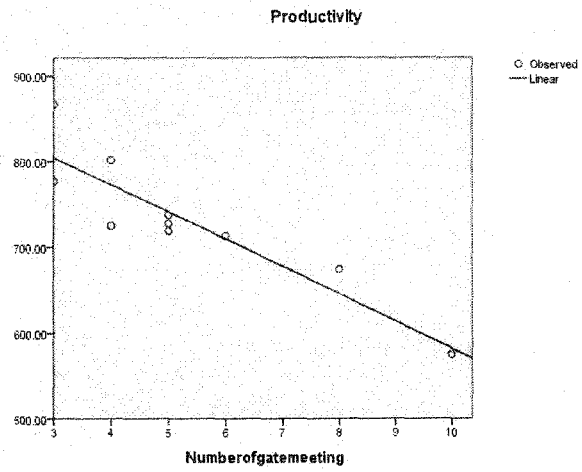


Diagram No-6.44

12. Karballa Tea Estate

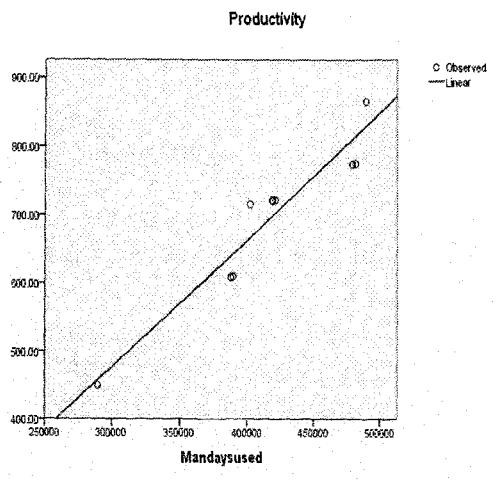


Diagram No-6.45

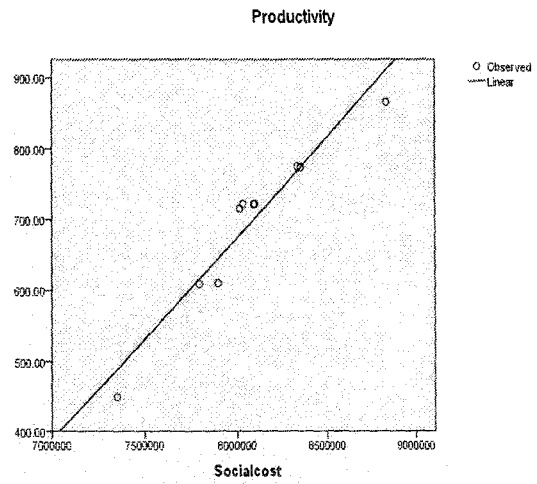


Diagram No-6.46

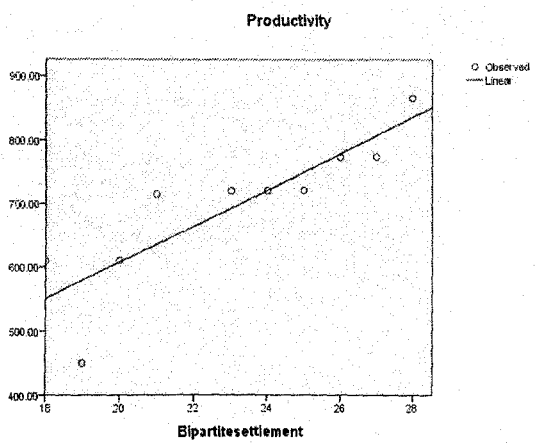


Diagram No-6.47

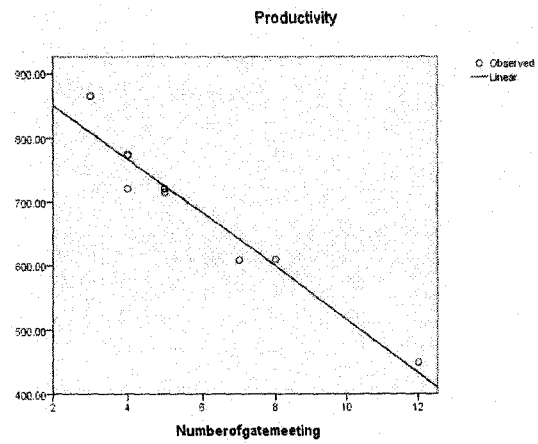


Diagram No-6.48

13. Hilla Tea Garden

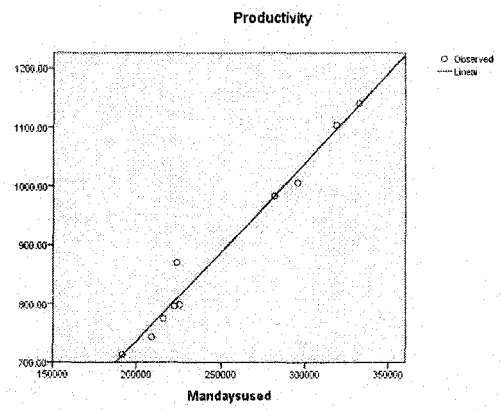


Diagram No-6.49

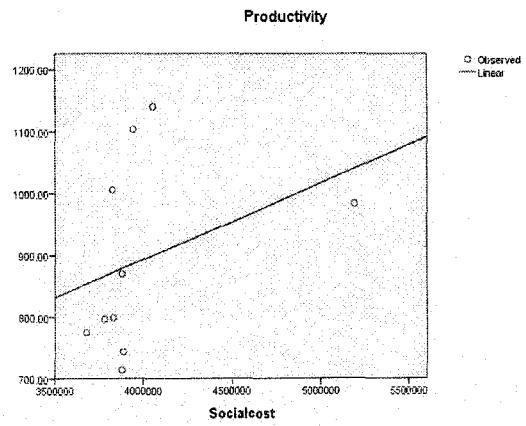


Diagram No-6.50

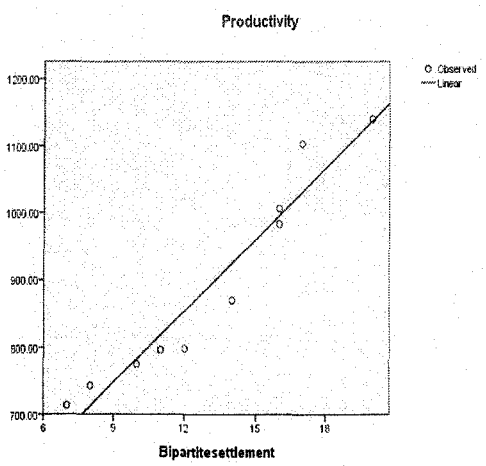


Diagram No-6.51

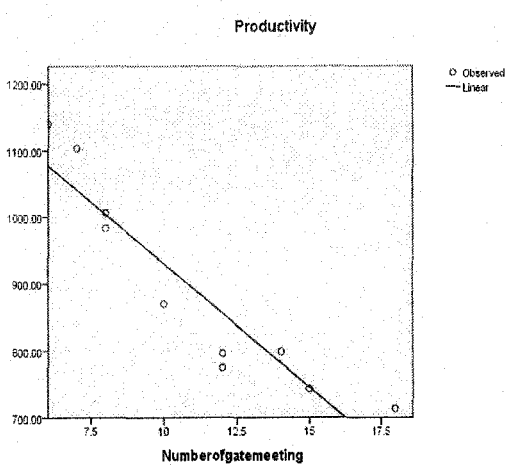
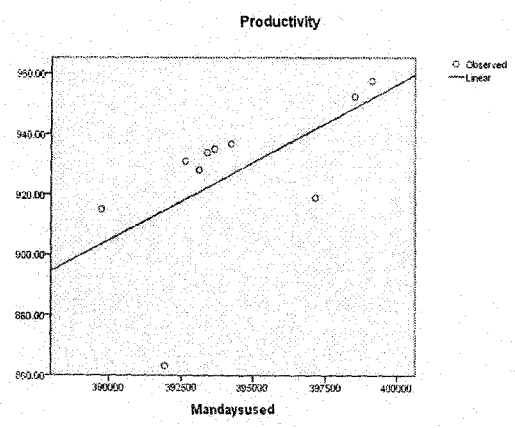


Diagram No-6.52

14. New Dooars Tea Garden



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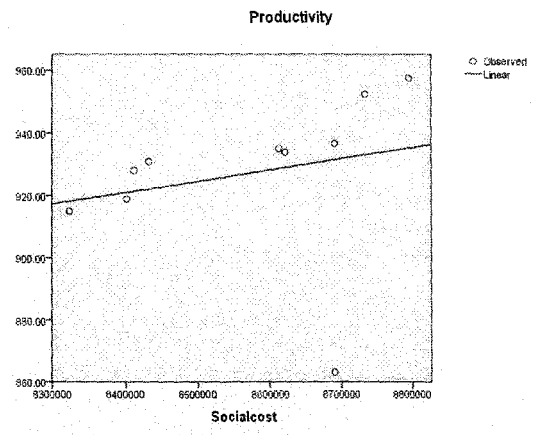

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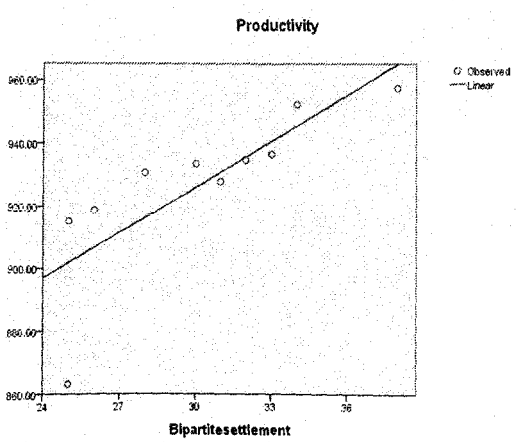


Diagram No-6.55

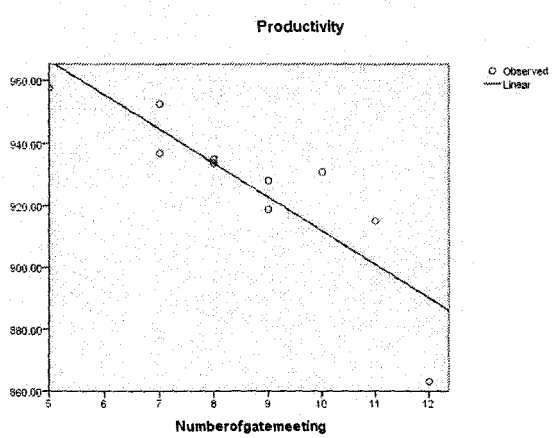


Diagram No-6.56

15. Choonabhati tea Estate

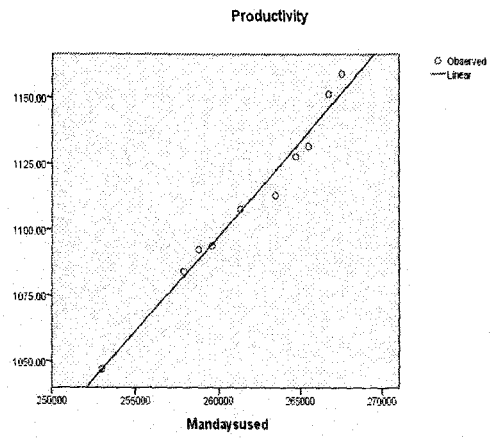


Diagram No-6.57

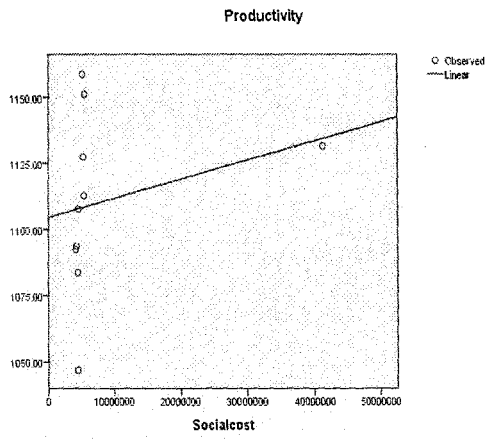


Diagram No-6.58

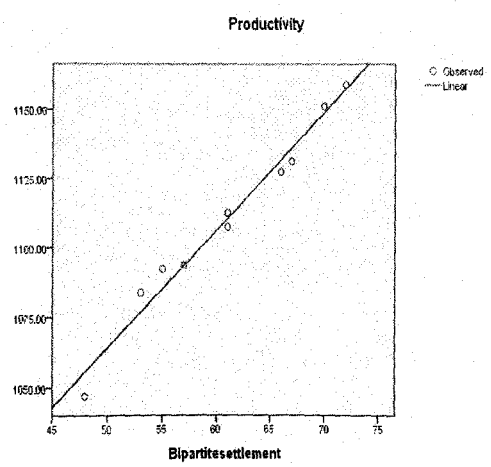


Diagram No-6.59

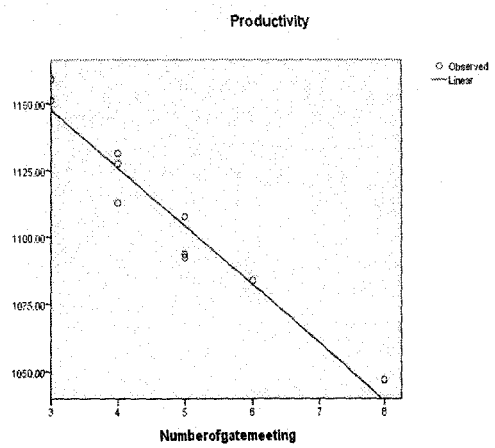


Diagram No-6.60

16. Killcott tea Garden

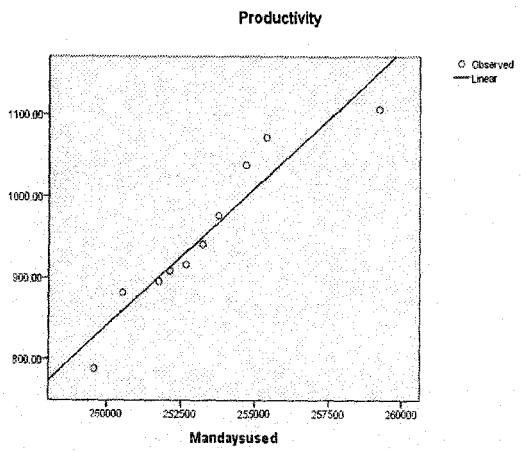


Diagram No-6.61

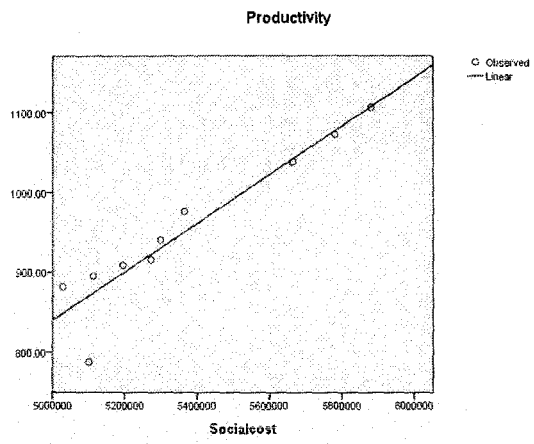


Diagram No-6.62

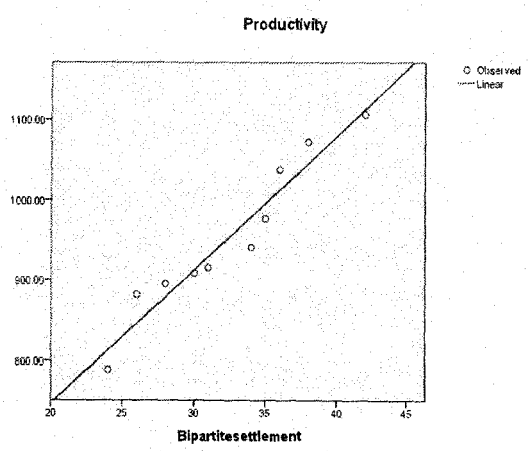


Diagram No-6.63

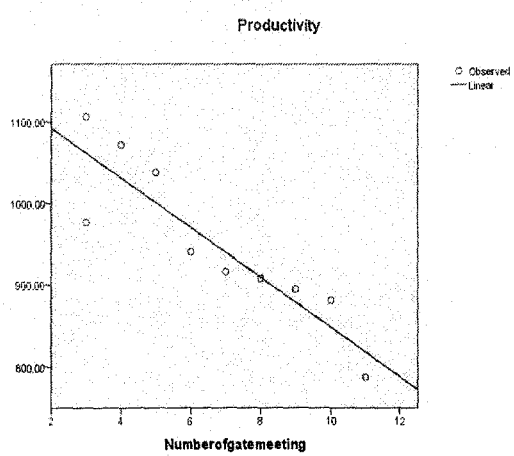


Diagram No-6.64

17. Nagaisuree Tea Garden

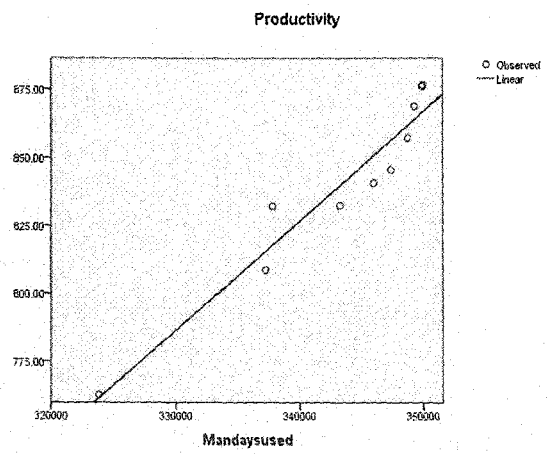


Diagram No-6.65

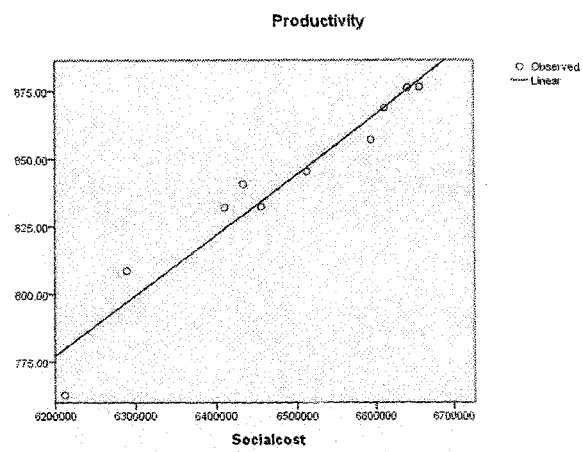


Diagram No-6.66

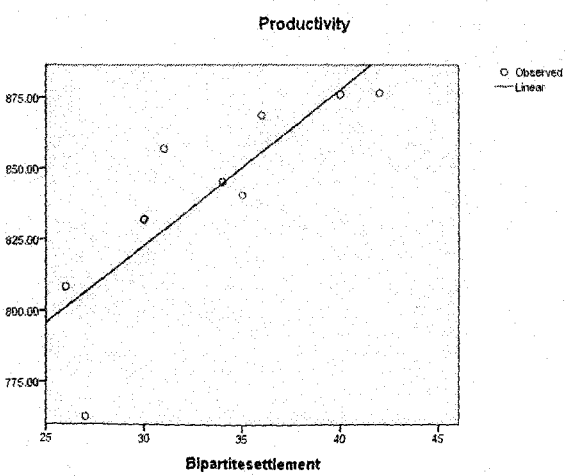


Diagram No-6.67

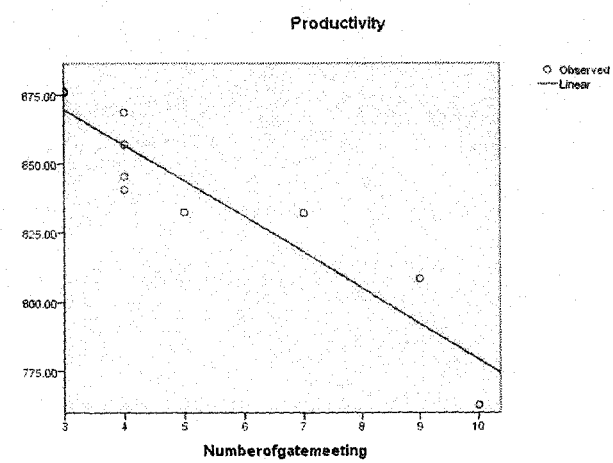


Diagram No-6.68

18. Bagrakote Tea Estate

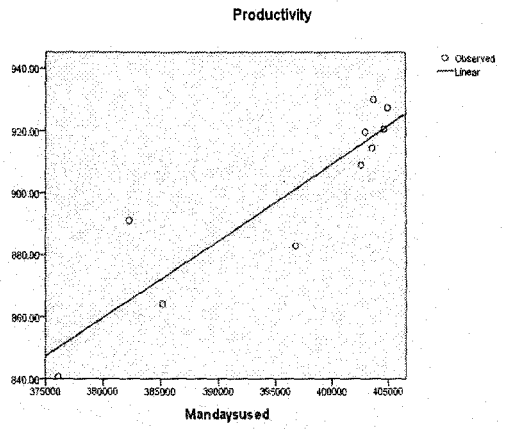


Diagram No-6.69

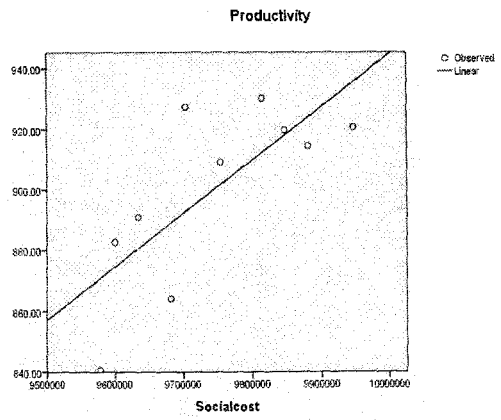


Diagram No-6.70

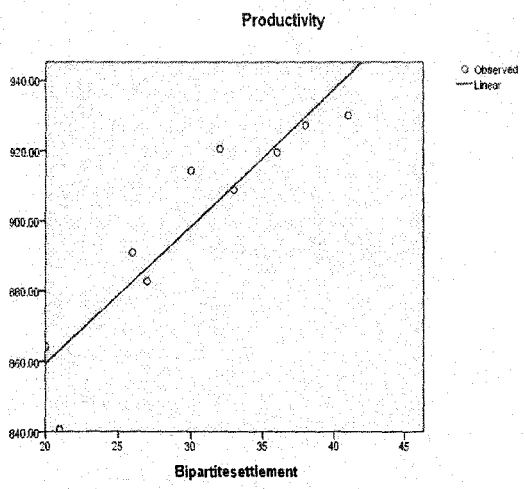


Diagram No-6.71

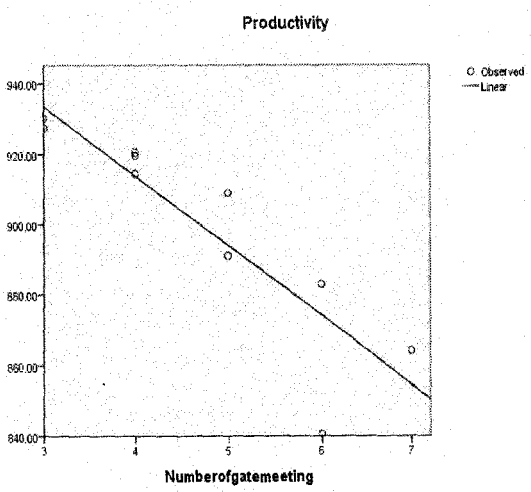


Diagram No-6.72

19. Birpara Tea Garden

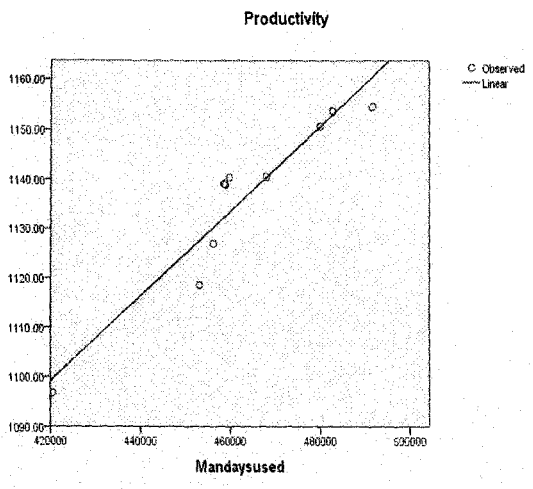


Diagram No-6.73

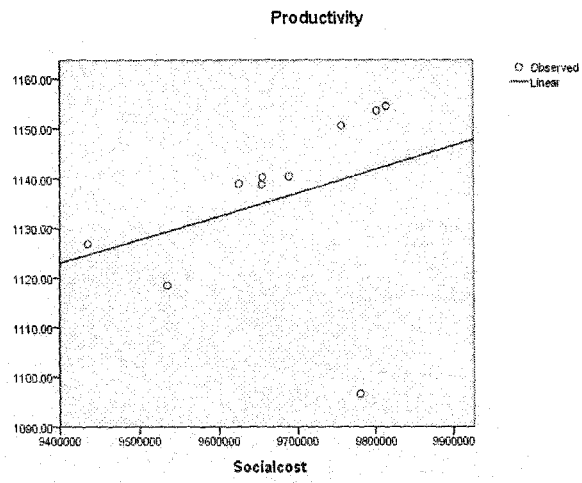


Diagram No-6.74

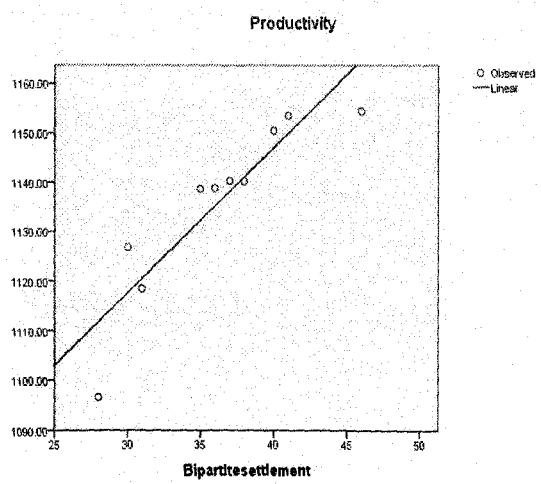


Diagram No-6.75

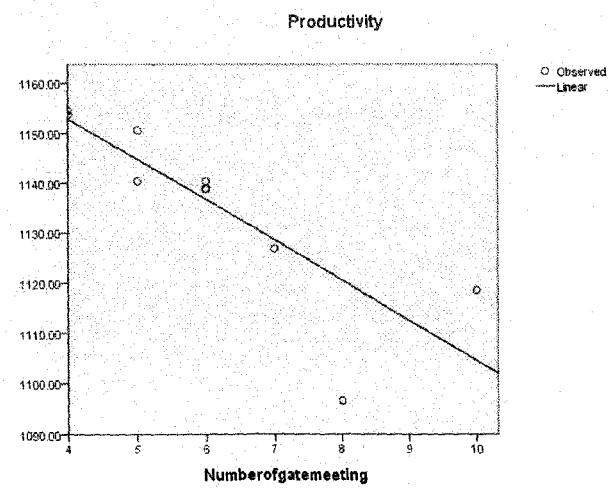


Diagram No-6.76

20. Lankapara Tea Estate

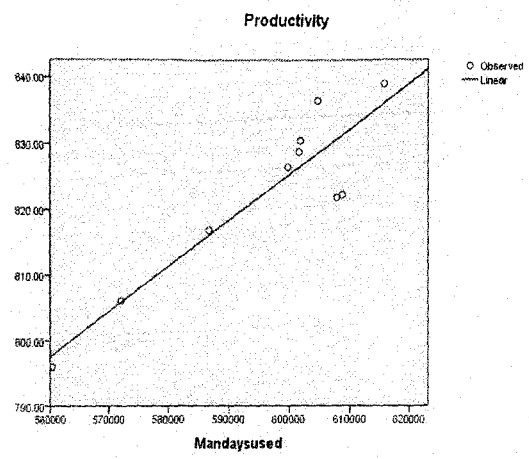


Diagram No-6.77

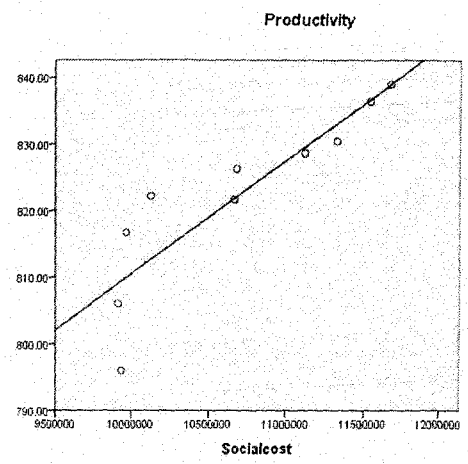
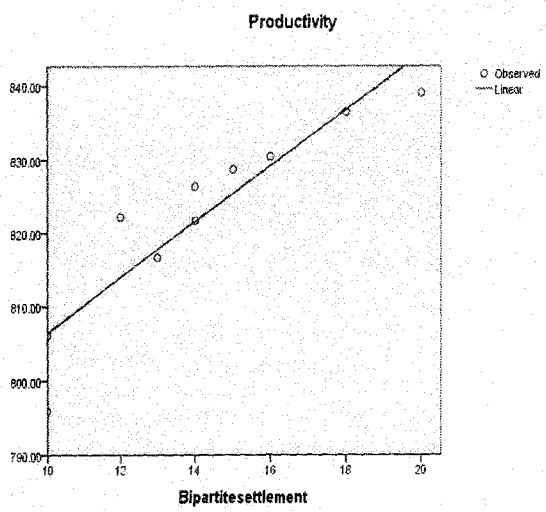


Diagram No-6.78



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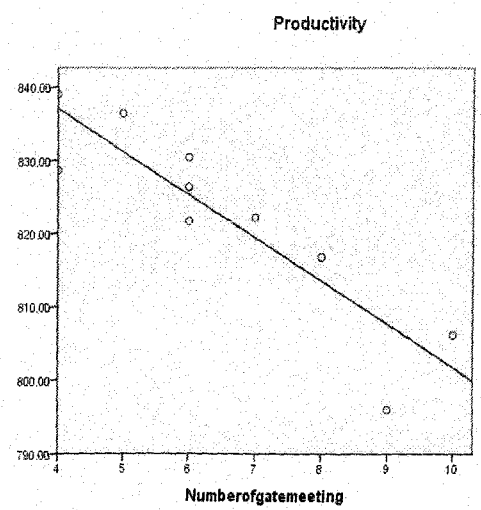
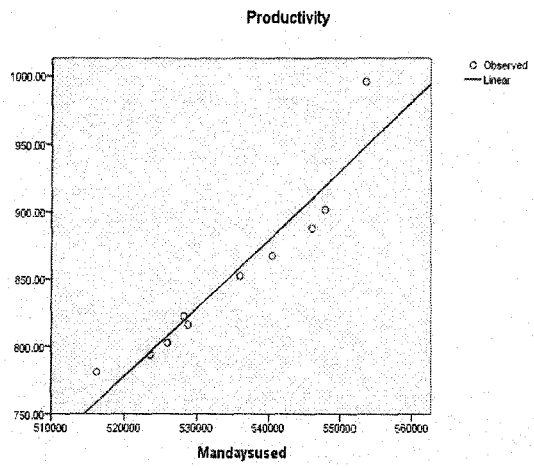


Diagram No-6.80

21. Rungamuttee Tea Estate



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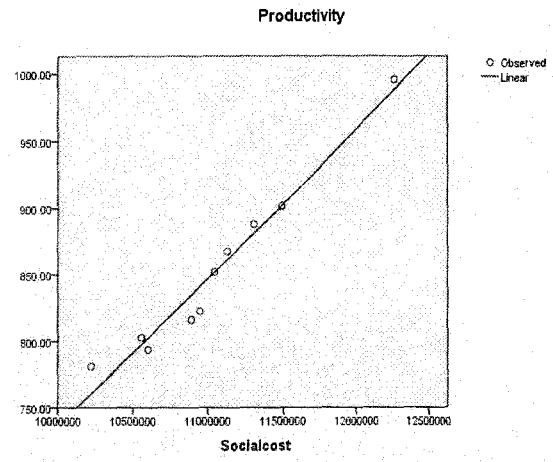

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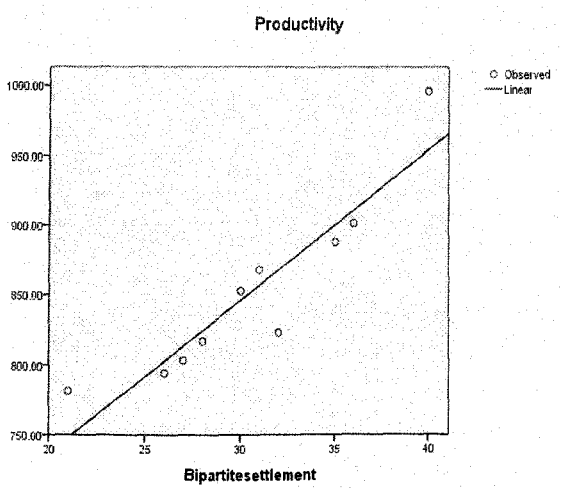

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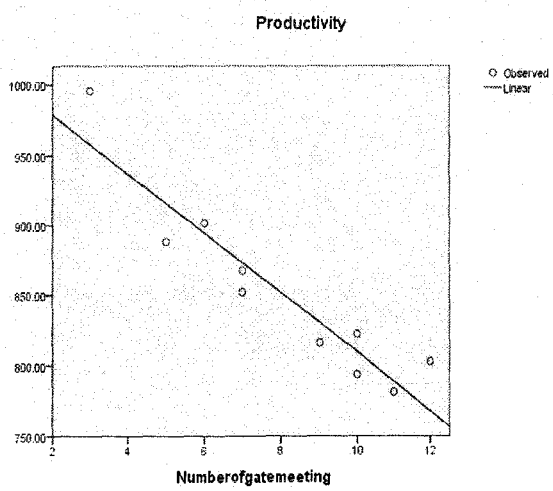
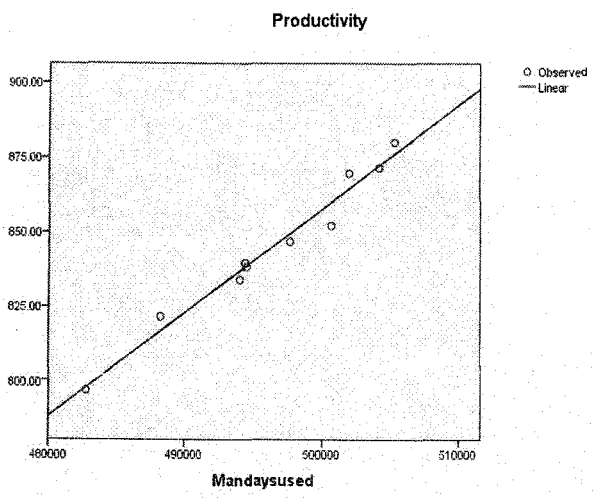


Diagram No-6.84

22. Damdim Tea Estate



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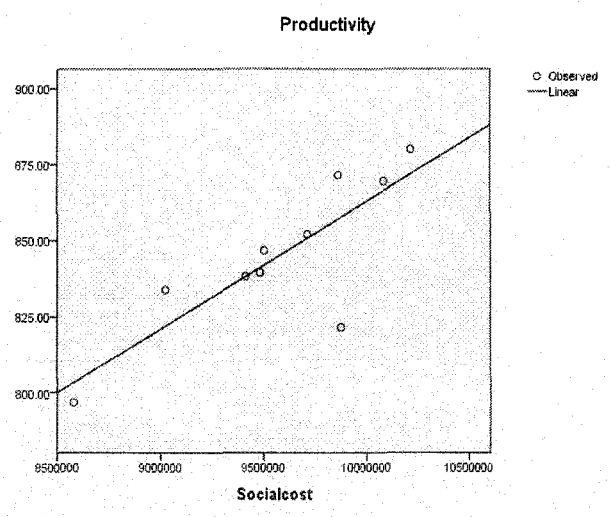

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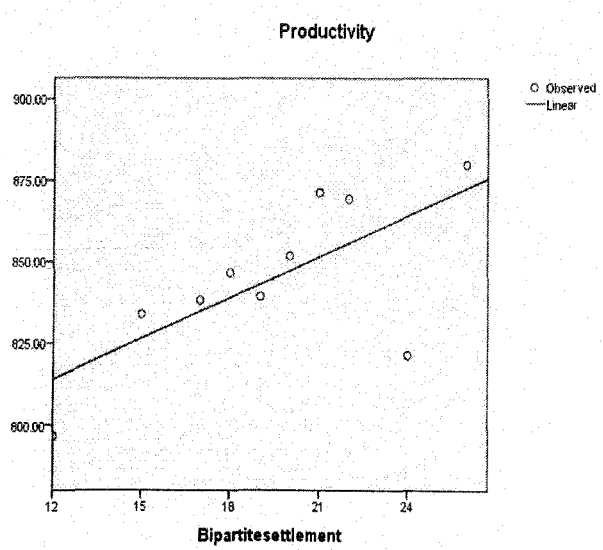

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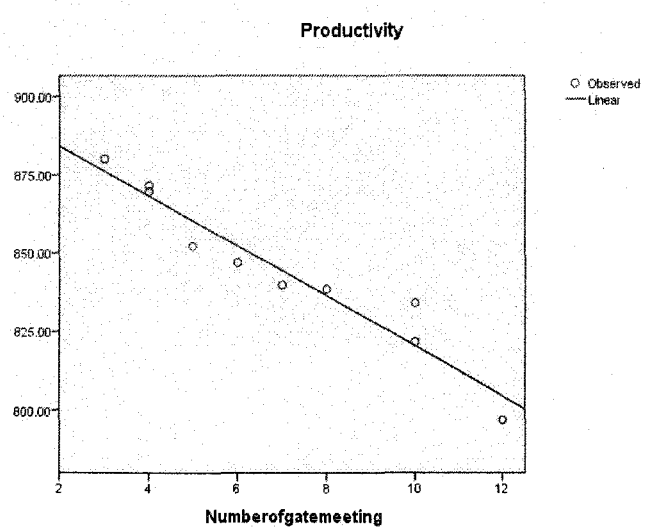
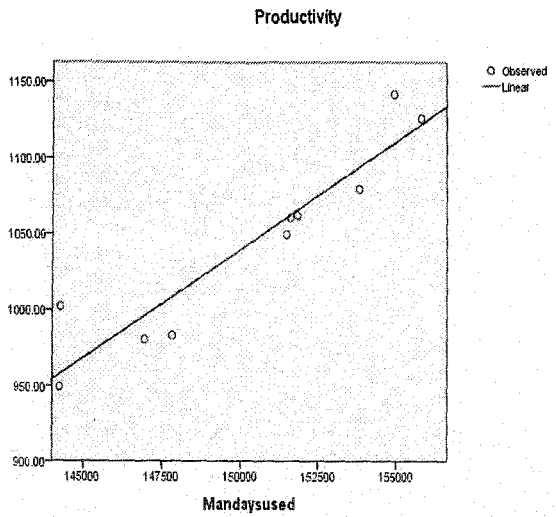


Diagram No-6.88

23. Batabari Tea Estate



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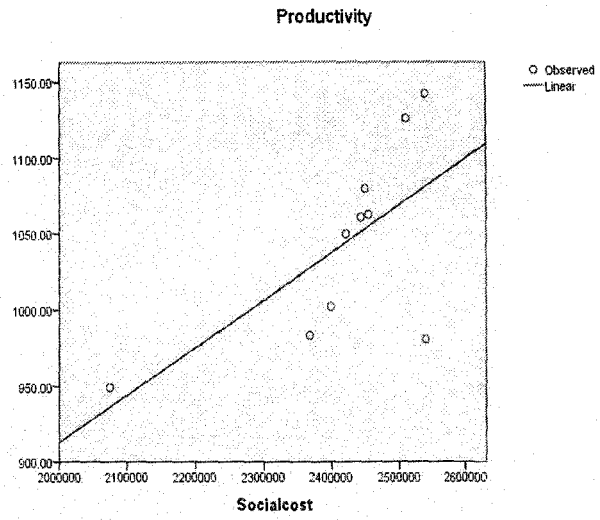

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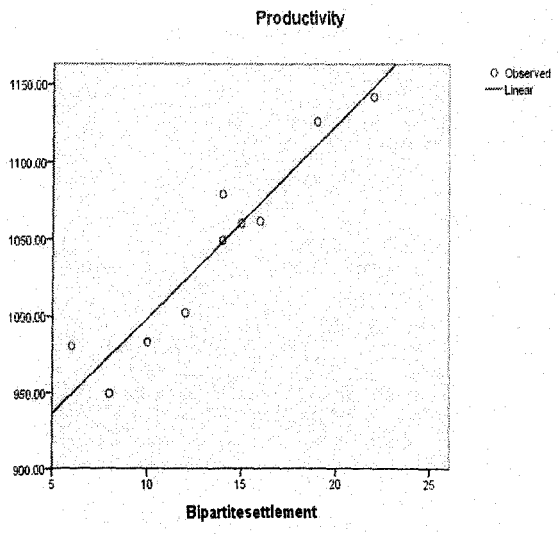

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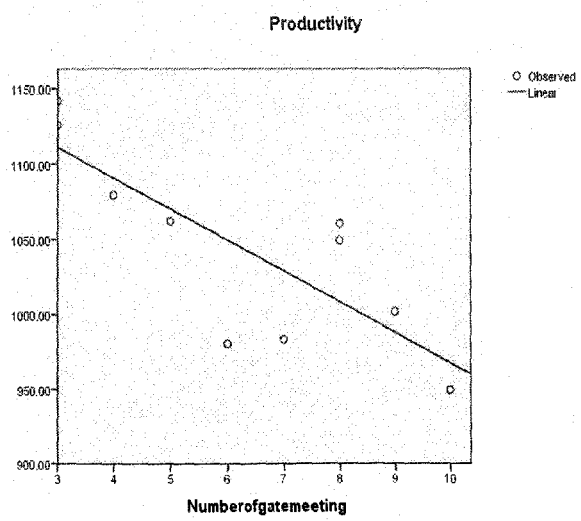
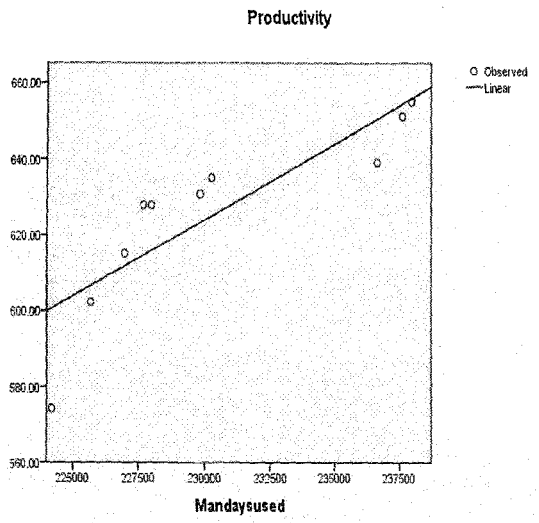


Diagram No-6.92

24. Neoranuddy Tea Estate



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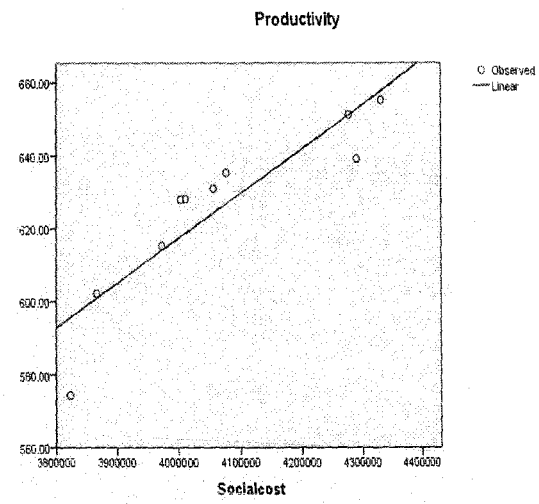
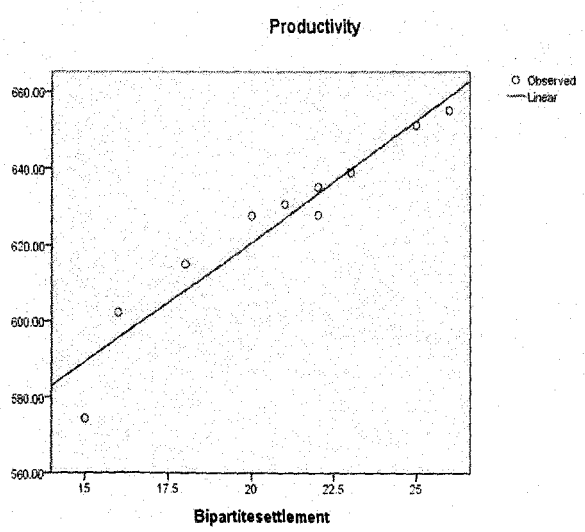


Diagram No-6.94



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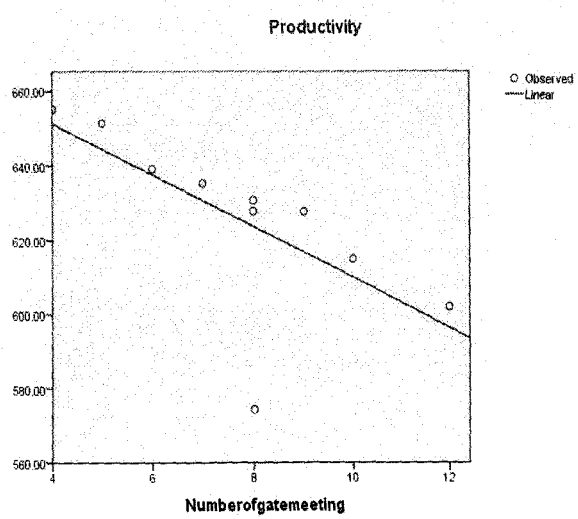
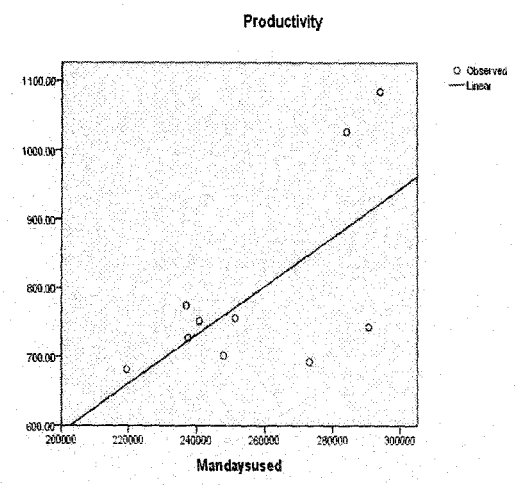


Diagram No-6.96

25. Totapara Tea Estate



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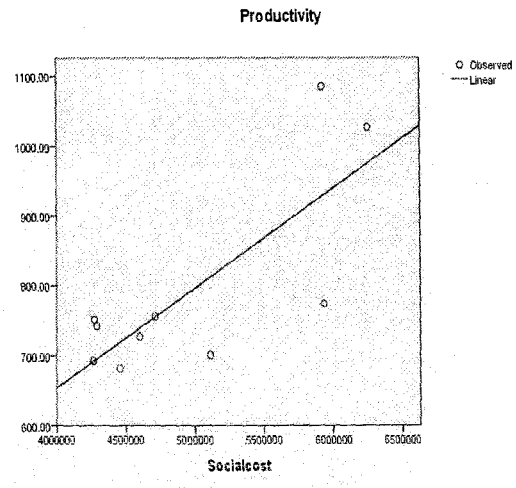

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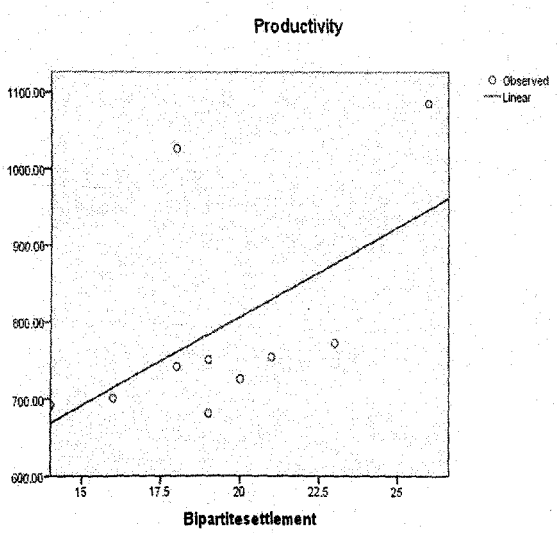

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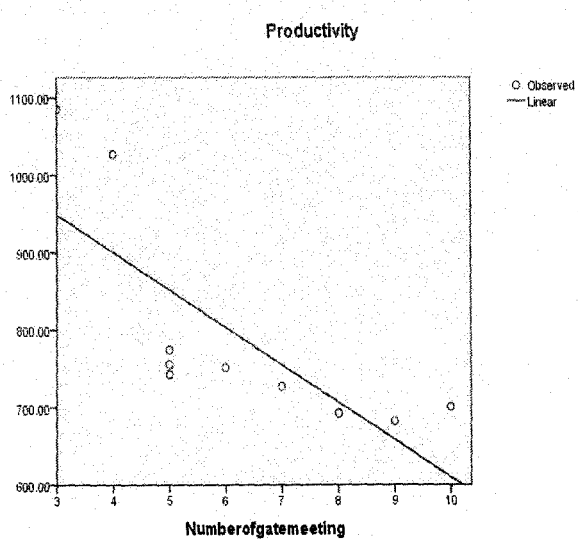
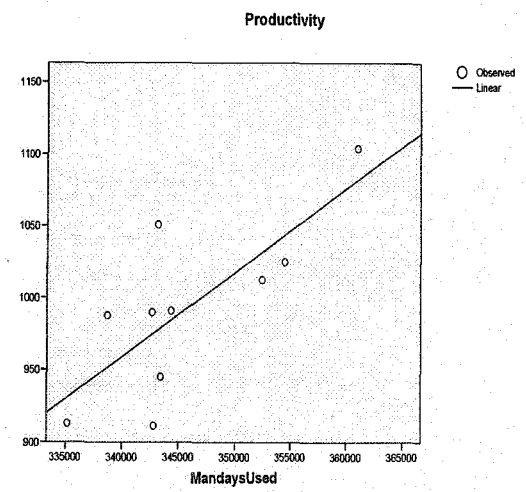


Diagram No-6.100

26. ETHELBARI TEA ESTATE



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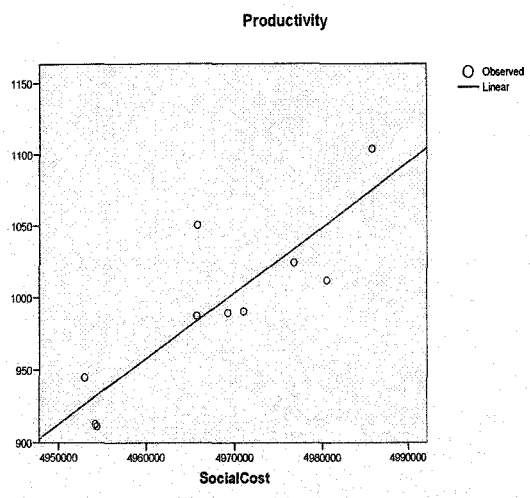


Diagram No-6.102

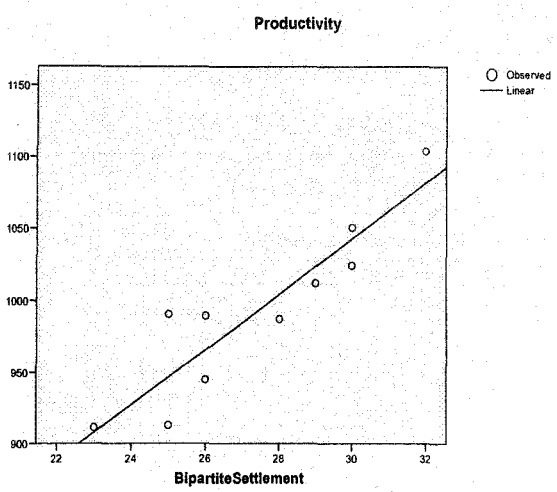


Diagram No-6.103

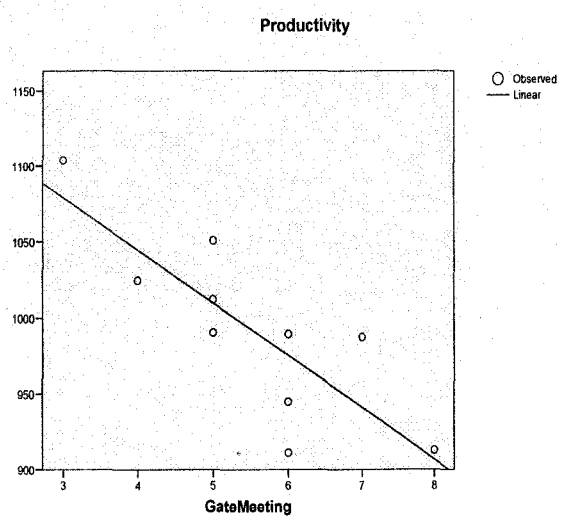


Diagram No-6.104

27. BAINTGOORIE TEA ESTATE

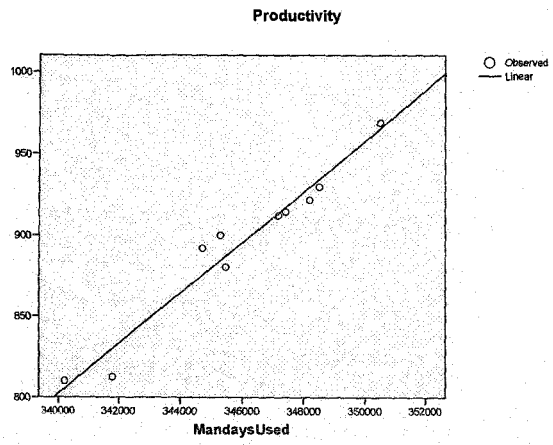


Diagram No-6.105

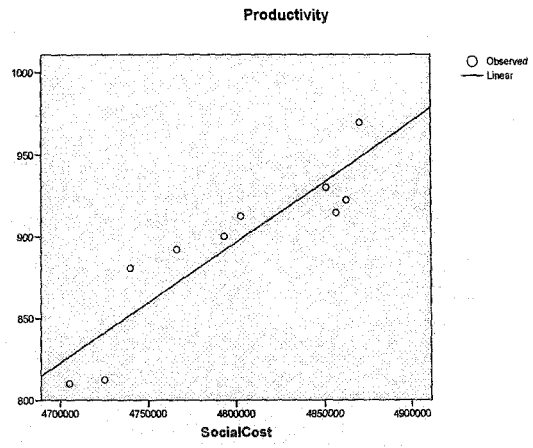


Diagram No-6.106

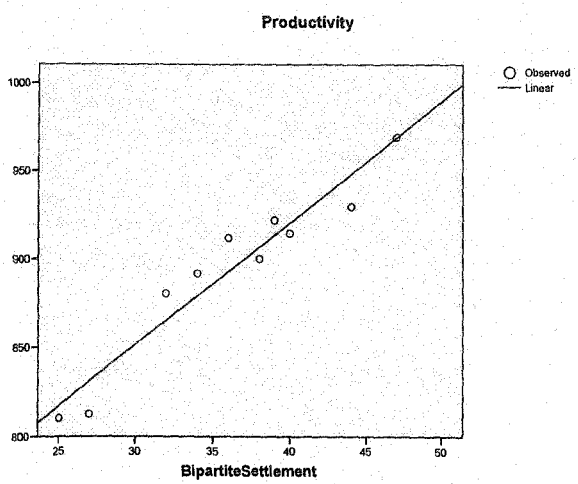


Diagram No-6.107

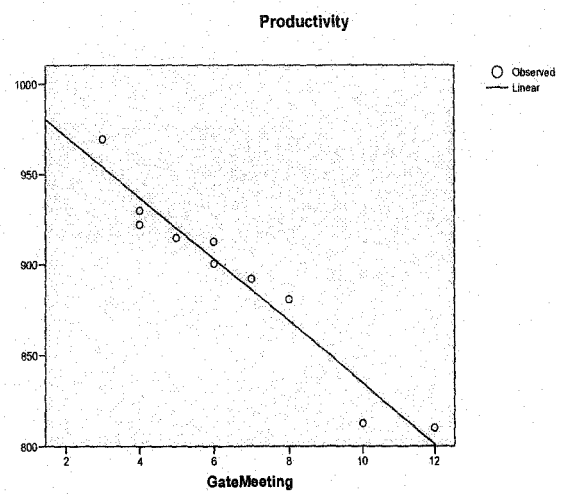


Diagram No-6.108

28. KUMARGRAM TEA ESTATE

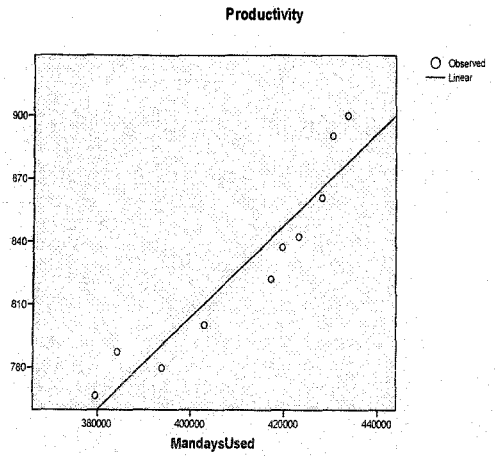


Diagram No-6.109

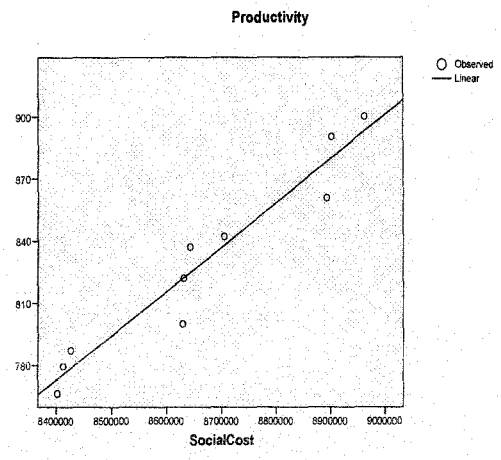


Diagram No-6.110

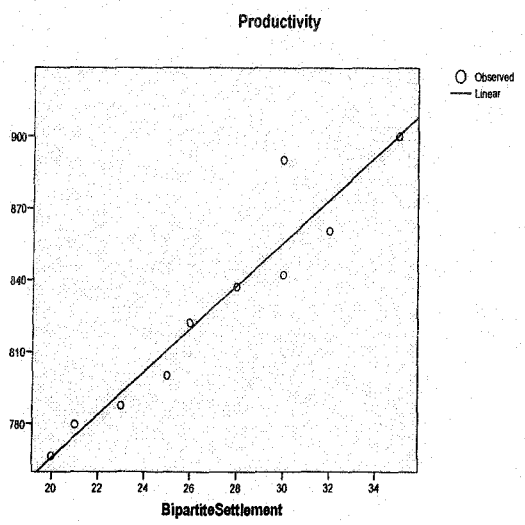


Diagram No-6.111

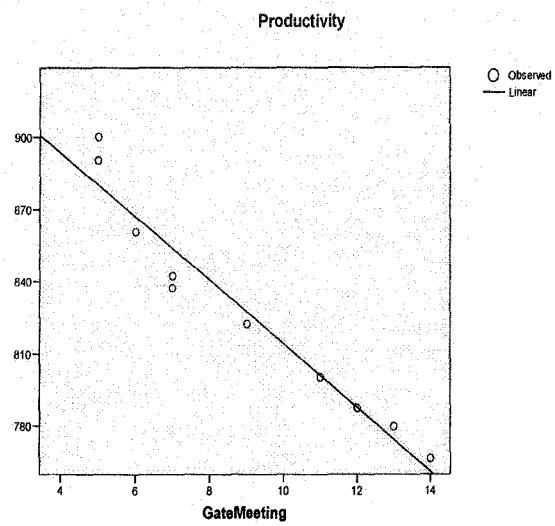


Diagram No-6.112

29. MATELLI TEA ESTATE

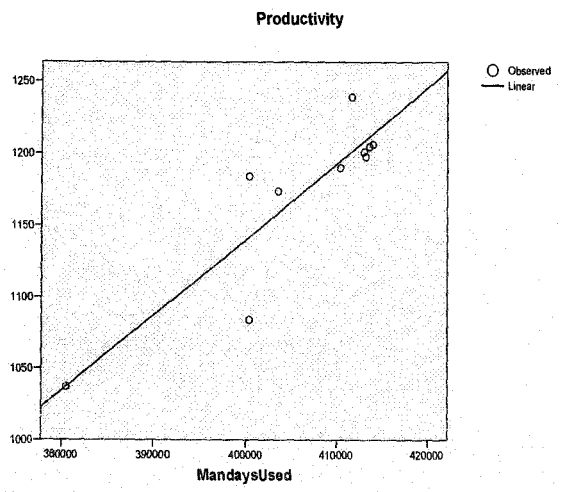


Diagram No-6.113

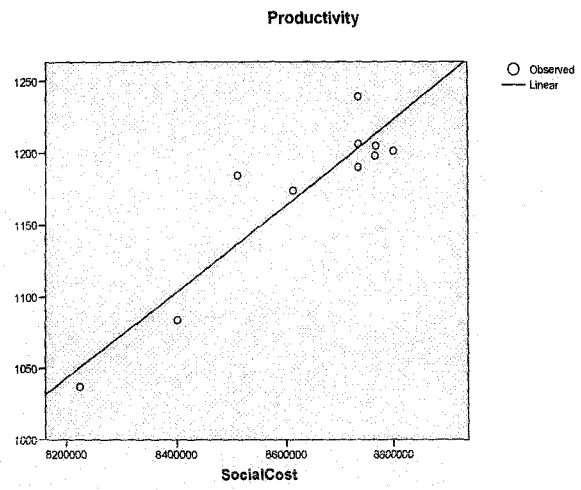


Diagram No-6.114

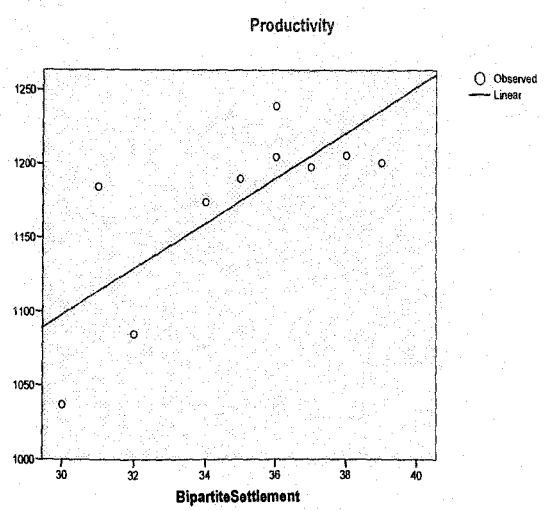


Diagram No-6.115

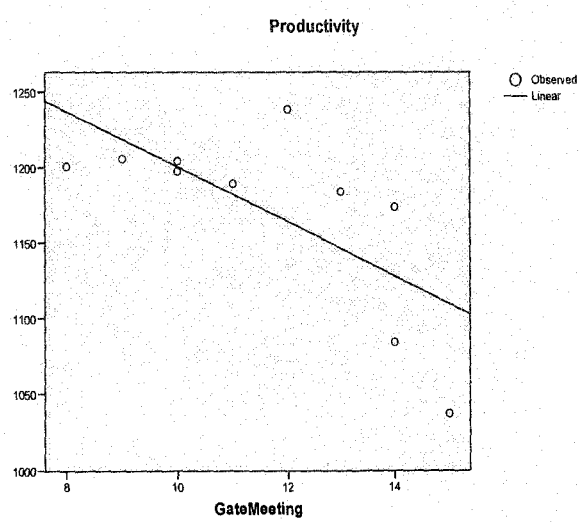


Diagram No-6.116

30. KURTI TEA ESTATE

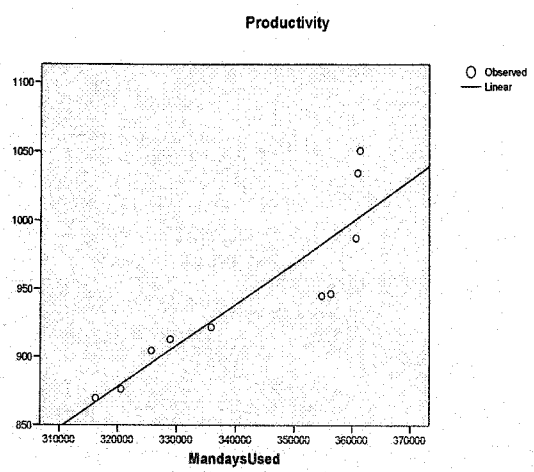


Diagram No-6.117

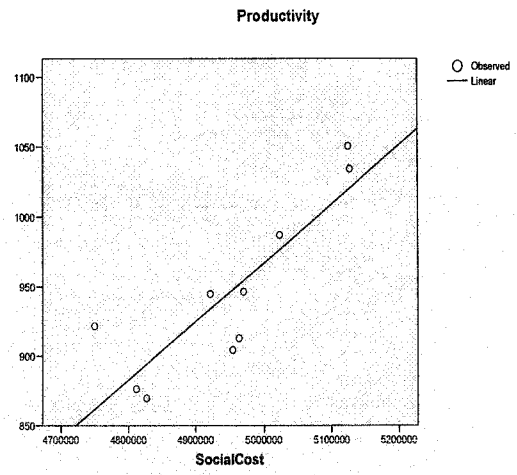


Diagram No-6.118

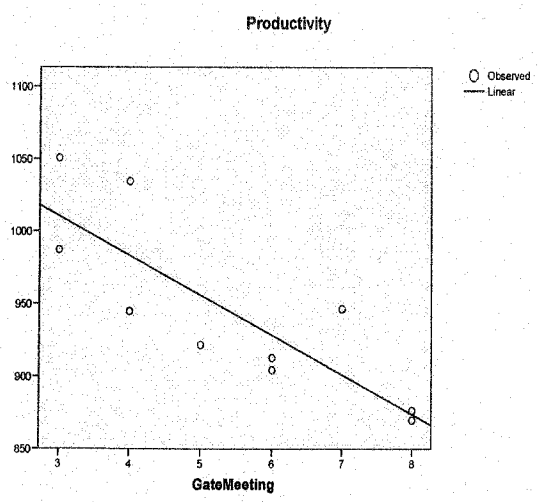


Diagram No-6.119

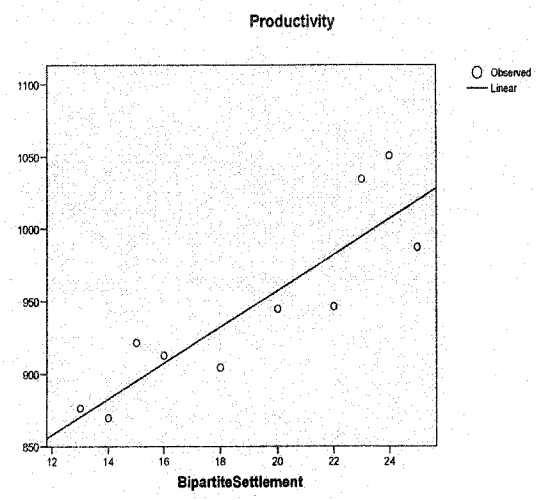


Diagram No-6.120

6.3: Overall Analysis of Gardens

After analysis, findings and interpretation of individual gardens we have also analyzed overall sample tea gardens over the study period located in the Dooars region of West Bengal. We have calculated average of labour productivity, man days used, social cost, number of bipartite settlements and number of gate meetings held. The results of average man days used, social cost, number of bipartite settlements and number of gate meetings held and their graphical representation are given below.

Table: 6.3. Computation of Average Labour Productivity, Man days Used, Man days Lost, Social Cost, No. of Bipartite Settlements and No. of Gate Meetings

Year	Av.Productivity	Av.Man days Used	Av.Social Cost	Av. Bipartite Settlements	Av.Gate Meeting
1998	878.82	347383	5456476	30	11
1999	868.08	346303	5423625	29	12
2000	876.62	350643	5457105	30	11
2001	887.3	351257	5473317	33	10
2002	888.67	352444	5530529	33	11
2003	904.00	365122	5603703	35	6
2004	893.17	354529	5434378	33	7
2005	847.81	337000	5274502	27	16
2006	915.22	380140	5555794	36	8
2007	903.06	355140	5570000	35	8

Fig.6.121: Average Productivity Curve

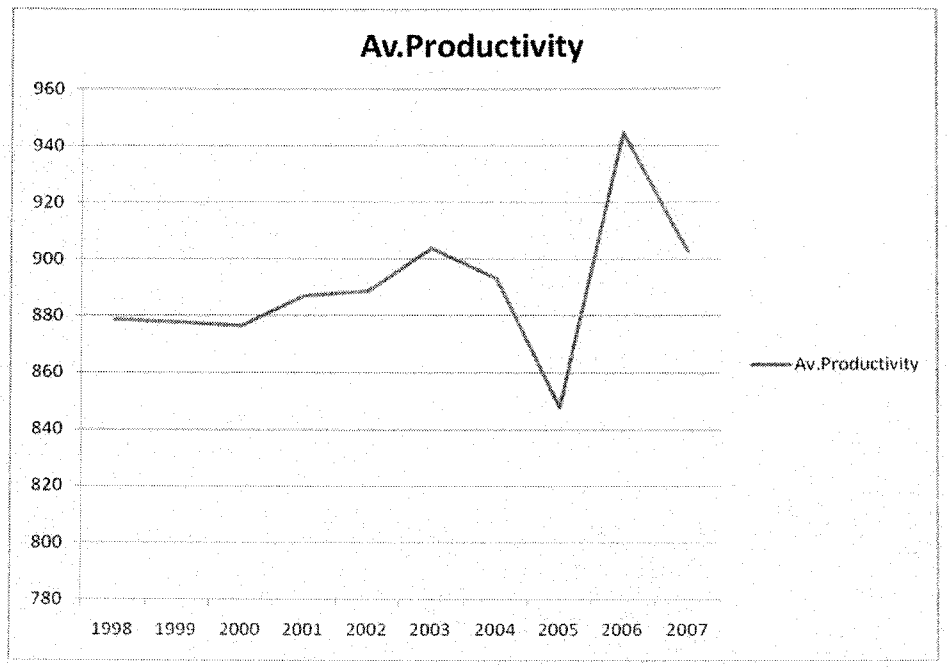


Fig.6.122: Average Man days Used Curve

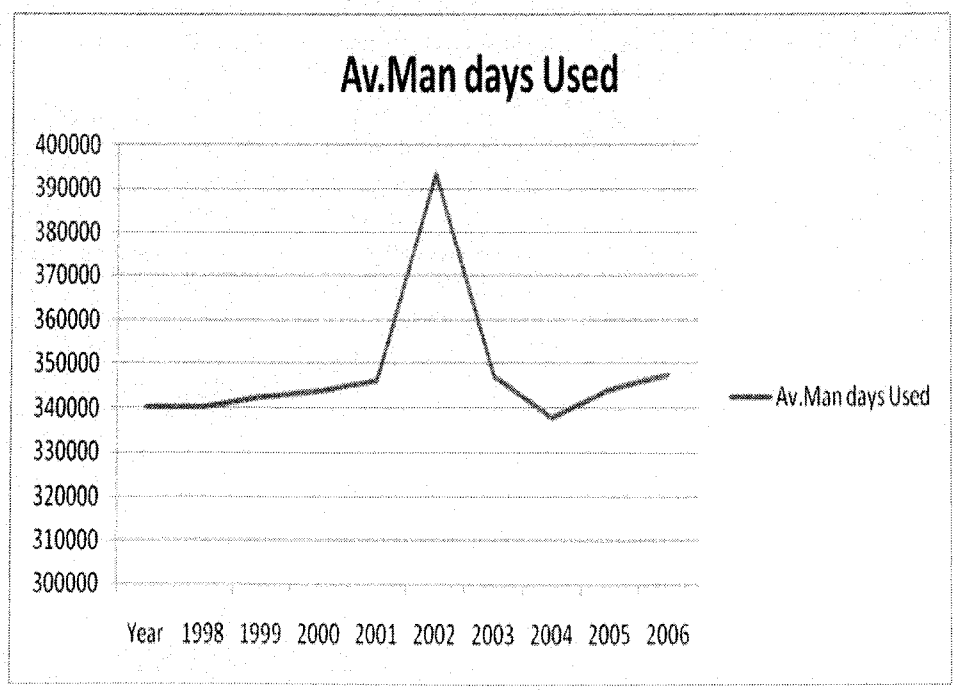


Fig.6.123: Average Social Cost Curve

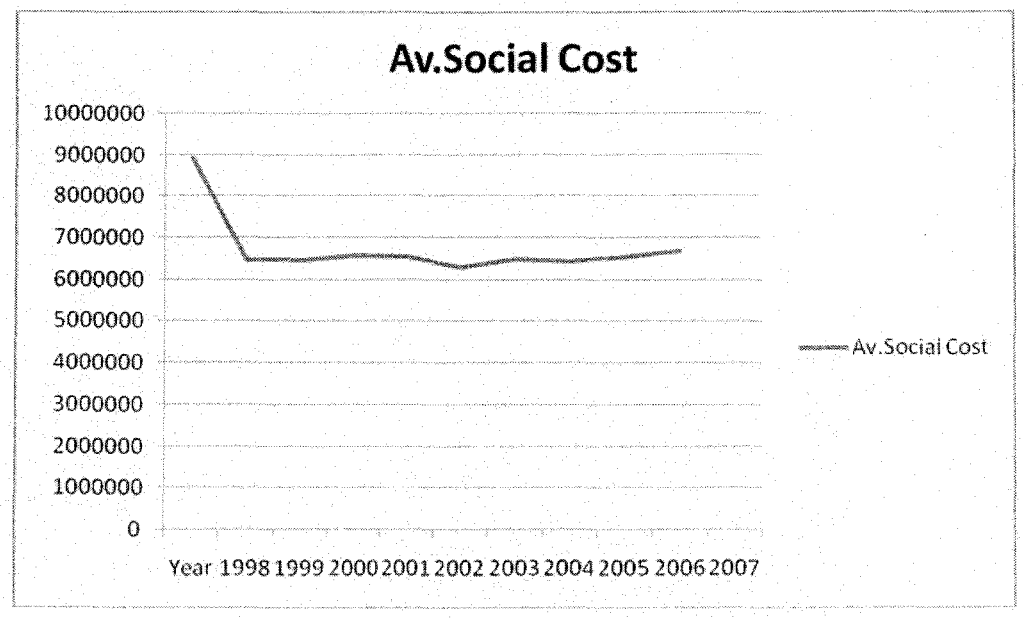


Fig.6.124: Average Bipartite Settlements Curve

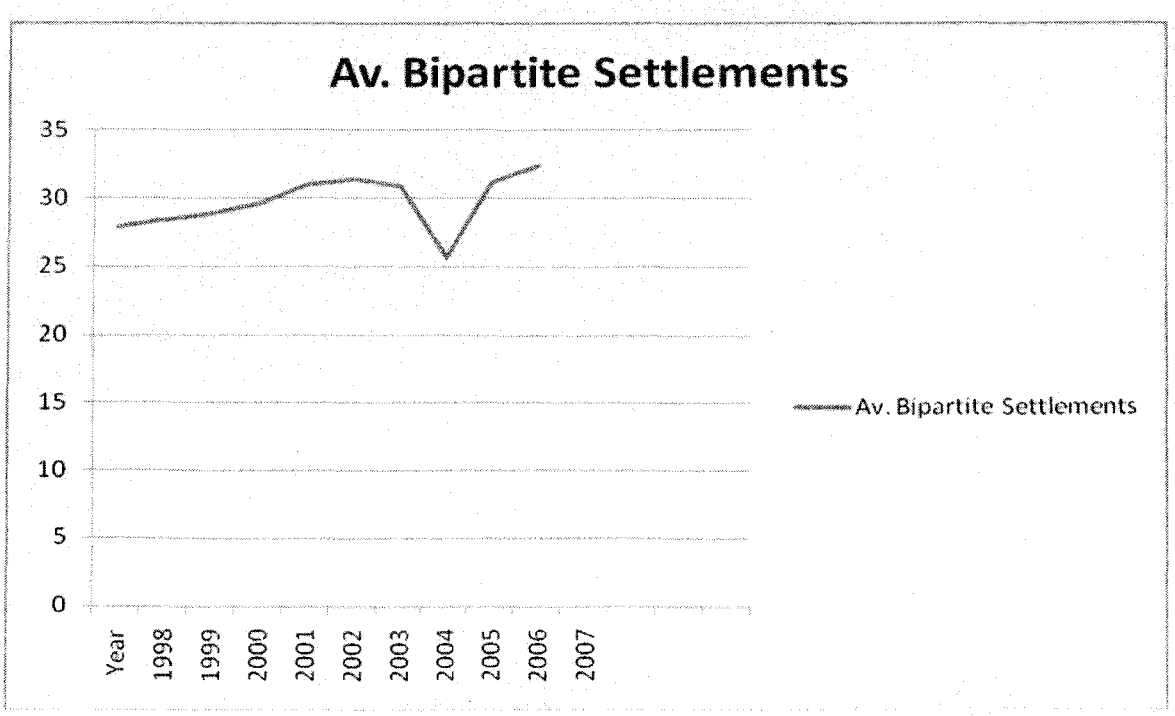
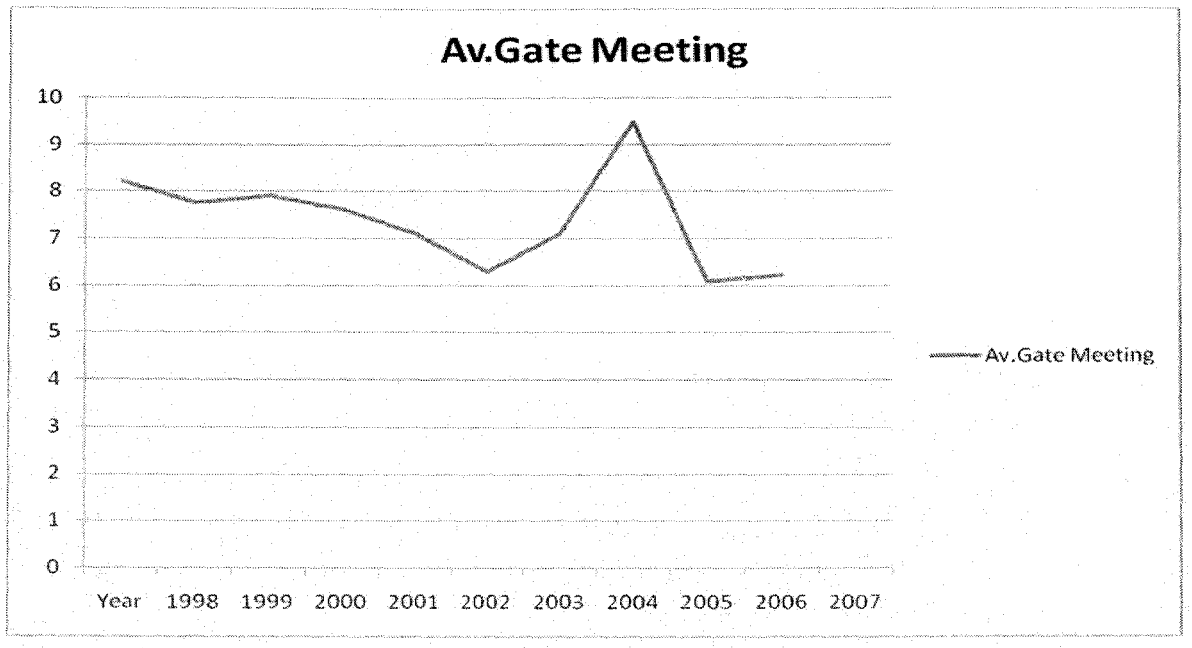


Fig.6.125: Average Gate Meeting Curve



In this part, an attempt would be made to examine the impact of average man days used, average social cost, average number of bipartite settlements and average number of gate meeting of thirty sample tea gardens over the period of study on labour productivity.

That is why; Regression Equation Model has been applied. However, Test of Hypothesis would also be applied to know the significance level of the relation that would be derived from regression analysis method. In this study average man days used, average social cost, average number of bipartite settlements and average number of gate meeting have been regarded as independent variables and labour productivity has been taken as a dependent variable. The logic behind this assumption is that man days used, average social cost, average number of bipartite settlements and average number of gate meeting by and large affect labour productivity of an organization. Therefore, linear regression equation model can be applied to examine the relation between the two variables at a time considering one variable as independent and the other one as a dependent variable. In total, we have four pairs of variables. These are average man days used and labour productivity, average social cost and labour productivity, average number of bipartite settlements and labour productivity and average number of gate meeting and labour productivity.

First, we would try to measure the impact of average man days used on labour productivity. The equation which has been applied may be expressed as follows:

$$Y = A + a_1 x_1$$

Where Y =Labour Productivity, A=Intercept or Constant value

a_1=Regression Coefficient of x_1 variable, x_1= Man days Used

The Regression equation has been set with the help of SPSS software and the results so derived are as follows:

Table: 6.4

Statement of Regression Output of Man days Used with LP

Number of observations	Constant Value	S.E of Constant	Regression Coefficient of x_1	S.E of x_1
10	351.52	.005	.02	.0015

Therefore the Regression equation is **$Y=351.52+.02\ x_1$**

The equation developed for the study of man days used clearly shows the regression coefficient is positive signifying existence of proportional relation between man days used and labour productivity in all thirty tea gardens taken together over the period of study.

But the extent of influence of man days used can be measured with the value of R^2 which signifies the degree of correlation between man days used and labour productivity. Let us now project the value of R^2 in the following Table No.6.5.

Table: 6.5

Statement of R^2 of Man days Used with LP

Name of Variable	Number of Observation	Value of R^2
Man days used	10	.78

The value of R^2 clearly shows that man days used has positive correlation with labour productivity.

To find out the significance level or reliability of the results of R^2, a Null Hypothesis H_0 and an Alternative Hypothesis as H_1 have been applied here for testing the Hypothesis.

The significance level of the relation between two variables can be determined with the help of the following formula.

Null Hypothesis: H_0 : $a_1 = 0$

Alternative Hypothesis: $a_1 \# 0$

Set $t_1 = a_{1-0} / SE\ of\ x_1$

Where t_1 =Test Statistic, a_1=Regression coefficient of x_1, x_1= man days used, SE=standard error of x_1.

The calculated value of 't_1' would then be compared with tabulated value at the 99 percent significance level. If the calculated value (CV) exceeds the tabulated value (TV), the alternative hypothesis would be accepted. This signifies the substantial relation between man days used and labour productivity.However, when calculated value would be less than the tabulated value, the null hypothesis would be accepted which signifies that there is no relation between the variables .The following table would show the CV of't' statistic and TV at the 99% significance level.

Table: 6.6

Statement of Significance Level of Man days Used with LP

No. of Observation	Degree of Freedom	Value of t	TV at 99% Significance Level	Difference between CV and TV
10	8	13.33	3.35	CV>TV

It is appeared from Table No. 6.6 that CV exceeds the TV at the 99% significance level. This means that Man days used has substantial relation with labour productivity at the 99% significance level.

It is also observed that man days used has decreased considerably during the period under study as a result the improvement of labour productivity is not remarkable.

Secondly, we would try to measure the impact of average social cost on labour productivity. The equation which has been applied may be expressed as follows:

$$Y = A + a_2x_2$$

Where Y =Labour Productivity, A=Intercept or Constant value

a_2=Regression Coefficient of X_2 variable, X_2= Social cost

The Regression equation has been set with the help of SPSS software and the results so derived are as follows:

Table: 6.7

Statement of Regression Output of Social Cost with LP

Number of observations	Constant Value	S.E of Constant	Regression Coefficient of x_2	S.E of x_2
10	138.99	.19	.16	.045

Therefore the Regression equation is $\mathbf{Y=138.99+.16\ x_2}$

The equation developed for the study of social cost clearly shows the regression coefficient is positive signifying existence of proportional relation between social cost and labour productivity in all thirty tea gardens taken together over the period of study.

But the extent of influence of social cost can be measured with the value of R^2 which signifies the degree of correlation between social cost and labour productivity. Let us now project the value of R^2 in the following Table No.6.8.

Table: 6.8

Statement of R^2 of Social Cost with LP

Name of Variable	Number of Observation	Value of R^2
Social Cost	10	.79

The value of R^2 clearly shows that social cost has positive correlation with labour productivity.
To find out the significance level or reliability of the results of R^2, a Null Hypothesis H_0 and an Alternative Hypothesis as H_1 have been applied here for testing the Hypothesis.

The significance level of the relation between two variables can be determined with the help of the following formula.

Null Hypothesis: H_0 : $a_{2=0}$
Alternative Hypothesis: $a_{2 \# 0}$
Set $t_2 = a_{2-0} / SE \text{ of } x_2$

Where t_2 =Test Statistic, a_2=Regression coefficient of x_2, x_2= social cost, SE=standard error of x_2.

The calculated value of 't_2' would then be compared with tabulated value at the 99 percent significance level. If the calculated value (CV) exceeds the tabulated value (TV), the alternative hypothesis would be accepted. This signifies the substantial relation between social cost and labour productivity. However, when calculated value would be less than the tabulated value, the null hypothesis would be accepted which signifies that there is no relation between the variables .The following table would show the CV of 't' statistic and TV at the 99% significance level.

Table: 6.9

Statement of Significance Level of Social Cost with LP

No. of Observation	Degree of Freedom	Value of t	TV at 99% Significance Level	Difference between CV and TV
10	8	3.55	3.35	CV>TV

It is appeared from Table No. 6.9 that CV exceeds the TV at the 99% significance level. This means that social cost has substantial relation with labour productivity at the 99% significance level.

It is also observed that social cost has become more or less stable during the period under study
as a result the improvement of labour productivity is not significant.

Thirdly, we would try to measure the impact of average number of bipartite settlements on labour productivity.The equation which has been applied may be expressed as follows:

$$Y = A + a_3x_3$$

Where Y =Labour Productivity, A=Intercept or Constant value
a_3=Regression Coefficient of X_3variable, X_3= number of bipartite settlements

The Regression equation has been set with the help of SPSS software and the results so derived are as follows:

Table: 6.10

Statement of Regression Output of Bipartite Settlements with LP

Number of observations	Constant Value	S.E of Constant	Regression Coefficient of x_4	S.E of x_3
10	678.47	15.23	6.47	.47

Therefore the Regression equation is **$Y=678.47+6.47\ x_3$**

The equation developed for the study of bipartite settlements clearly shows the regression coefficient is positive signifying existence of proportional relation between bipartite settlements and labour productivity in all thirty tea gardens taken together over the period of study.

But the extent of influence of can be measured with the value of R2 which signifies the degree of correlation between bipartite settlements and labour productivity. Let us now project the value of R^2 in the following Table No.6.11.

Table: 6.11
Statement of R^2 of Bipartite Settlements with LP

Name of Variable	Number of Observation	Value of R^2
Bipartite Settlement	10	.95

The value of R^2 clearly shows that bipartite settlements has positive correlation with labour productivity.

To find out the significance level or reliability of the results of R^2, a Null Hypothesis H_0 and an Alternative Hypothesis as H_1 have been applied here for testing the Hypothesis.

The significance level of the relation between two variables can be determined with the help of the following formula.

Null Hypothesis: H_0 : $a_3 = 0$
Alternative Hypothesis: $a_3 \# 0$

Set $t_3 = a_{3-0} / SE \text{ of } x_3$

Where t_3 =Test Statistic, a_3=Regression coefficient of x_3, x_3= bipartite settlements, SE=standard error of x_3

The calculated value of 't_3' would then be compared with tabulated value at the 99 percent significance level. If the calculated value (CV) exceeds the tabulated value (TV), the alternative hypothesis would be accepted. This signifies the substantial relation between bipartite settlements and labour productivity. However, when calculated value would be less than the tabulated value, the null hypothesis would be accepted which signifies that there is no relation between the variables .The following table would show the CV of 't' statistic and TV at the 99% significance level.

Table: 6.12

Statement of Significance Level of Bipartite Settlements with LP

No. of Observation	Degree of Freedom	Value of t	TV at 99% Significance Level	Difference between CV and TV
10	8	13.76	3.35	CV>TV

It is appeared from Table No. 6.12 that CV exceeds the TV at the 99% significance level. This means that bipartite settlements has substantial relation with labour productivity at the 99% significance level.

It is also observed that bipartite settlements have decreased considerably during the period under study
As a result the improvement of labour productivity is not satisfactory.

Lastly, we would try to measure the impact of average gate meeting on labour productivity. The equation which has been applied may be expressed as follows:

$$Y = A + a_4x_4$$

Where Y =Labour Productivity, A=Intercept or Constant value

a_4=Regression Coefficient of x_4 variable, x_4= gate meeting

The Regression equation has been set with the help of SPSS software and the results so derived are as follows:

Table: 6.13

Statement of Regression Output of Gate Meeting with LP

Number of observations	Constant Value	S.E of Constant	Regression Coefficient of x_4	S.E of x_4
10	947.45	10.33	-6.11	.99

Therefore the Regression equation is **$Y=947.45-.6.11\ x_4$**

The equation developed for the study of gate meeting clearly shows the regression coefficient is negative signifying existence of inverse relation between gate meeting and labour productivity in all thirty tea gardens taken together over the period of study.

But the extent of influence of gate meeting can be measured with the value of R^2 which signifies the degree of correlation between gate meeting and labour productivity. Let us now project the value of R^2 in the following Table No.6.14.

Table: 6.14

Statement of R^2 of Gate Meeting with LP

Name of Variable	Number of Observation	Value of R^2
Gate Meeting	10	.80

The value of R^2 clearly shows that gate meeting has negative correlation with labour productivity.

To find out the significance level or reliability of the results of R^2, a Null Hypothesis H_0 and an Alternative Hypothesis as H_1 have been applied here for testing the Hypothesis.

The significance level of the relation between two variables can be determined with the help of the following formula.

Null Hypothesis: H_0 : $a_{4=0}$
Alternative Hypothesis: $a_{4 \# 0}$

Set $t_4 = a_{4-0} / SE \text{ of } x_4$

Where t_4 =Test Statistic, a_4=Regression coefficient of x_4, x_4= gate meeting, SE=standard error of x_4.

The calculated value of 't_4' would then be compared with tabulated value at the 99 percent significance level. If the calculated value (CV) exceeds the tabulated value (TV), the alternative hypothesis would be accepted. This signifies the substantial relation between gate meeting and labour productivity. However, when calculated value would be less than the tabulated value, the null hypothesis would be accepted which signifies that there is no relation between the variables .The following table would show the CV of 't' statistic and TV at the 99% significance level.

Table: 6.15

Statement of Significance Level of Gate Meeting with LP

No. of Observation	Degree of Freedom	Value of t	TV at 99% Significance Level	Difference between CV and TV
10	8	6.17	3.35	CV>TV

It is appeared from Table No. 6.15 that CV exceeds the TV at the 99% significance level. This means that gate meeting has substantial relation with labour productivity at the 99% significance level.

It is also observed that gate meeting has decreased considerably during the period under study as a result the improvement of labour productivity is becoming worse.

6.4: Observation of combined impact on labour productivity

In fact, for finding out the collective impact of the above mentioned four parameters of industrial relations over labour productivity, simple Linear Multiple Regression Equation has been applied taking labour productivity as a dependent variable and four parameters of industrial relations as independent variables .The following equation has been applied.

$$LP = A + a_1x_1+a_2x_2+a_3x_3+a_4x_4$$

Where LP = labour productivity, X_1= man days used, X_2=social cost, X_3=bipartite settlements, X_4= gate meeting, a_1=regression coefficient of x_1, a_2= regression coefficient of x_2, a_3= regression coefficient of x_3, a_4= regression coefficient of x_4.

Multiple Regression Analysis has been carried out with the help of SPSS software. For finding the direction of relation, the above results have been set in the Multiple Regression Equation in the following form.

$$Y = 518.30 + .001x_1 + .48x_2 + .34x_3 - 1.25x_4$$

The above noted equation clearly demonstrate that the regression coefficients of x_1,x_2 and x_3 are positive signifying x_1,x_2 and x_3 have direct proportional relationships with labour productivity and the value of regression coefficients of x_4 is negative signifying that x_4 has inverse relationships with labour productivity at industry level.

Moreover, the degree of influence of the above noted four parameters over labour productivity have been found out and as shown in Table 6.16.

Table: 6.16

Statement of R^2 of four Parameters with LP

Number of observation	Value of R^2	Degree of freedom
10	.97	5

The value of R^2 clearly shows that the above stated four parameters of industrial relations have high degree of relationship with labour productivity.

Now, for identifying the variable having highest influencing that best fit curves relating to labour productivity Vs social cost, bipartite settlements and gate meeting touché almost all points. It indicates that social cost, bipartite settlements and gate meeting have higher influencing power in explaining labour productivity. However a different picture has been noticed in respect of LP Vs man days used curve which touches only very few points. However, it may be referred to here that number of gate meetings have to be restricted and social cost and bipartite settlements have to be increased for enhancing labour productivity of a concern.

The linear curves relating to average man days used, average social cost, average gate meeting and average bipartite settlements are depicted as follows.

Fig.6.126: Labour Productivity vs. Man days Used

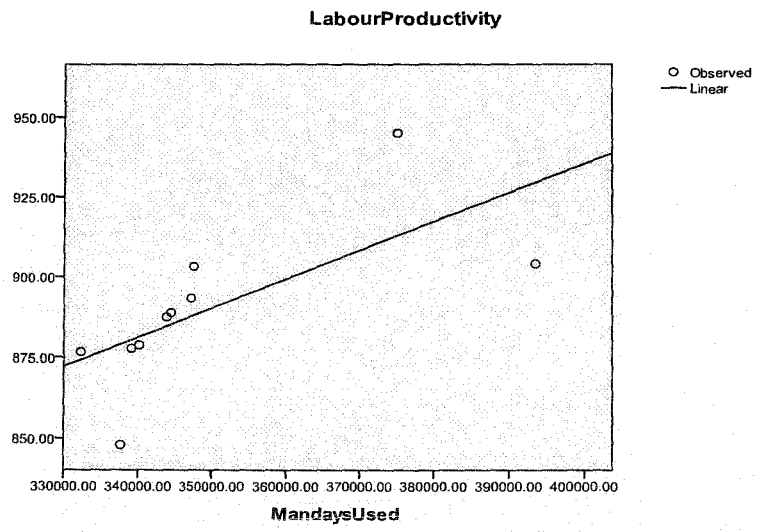


Fig.6.127: Labour Productivity vs. Social Cost

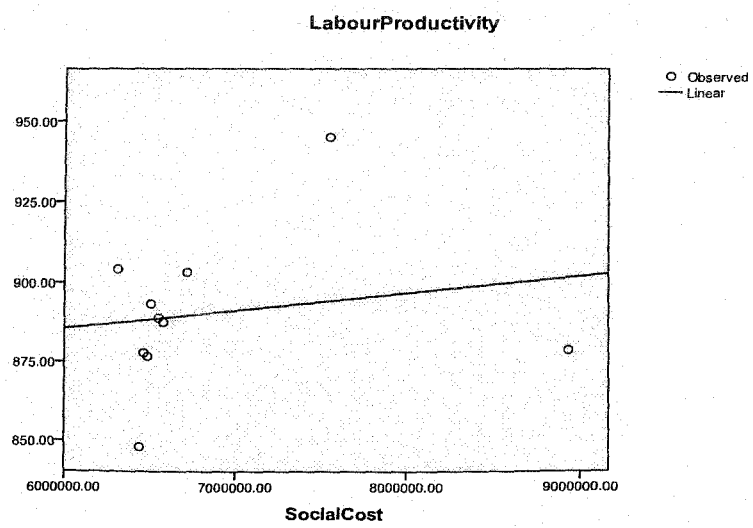


Fig.6.128: Labour Productivity vs. Bipartite Settlement

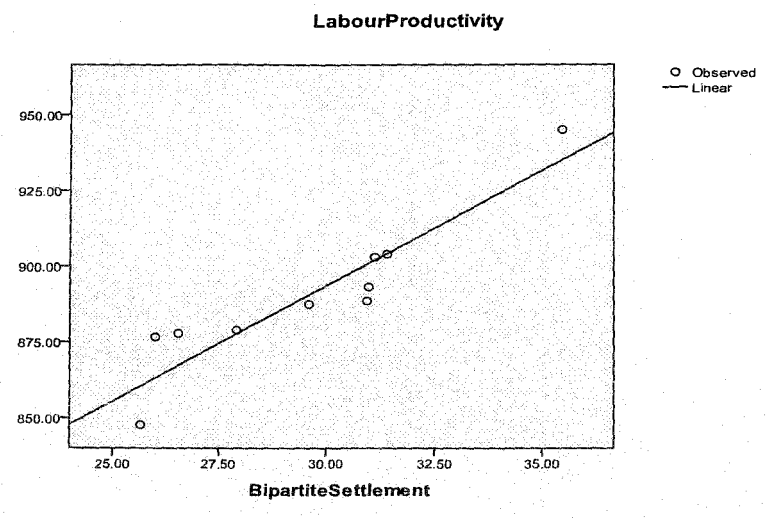


Fig.6.129: Labour Productivity vs. Gate Meeting