CHAPTER - 5

DATA ANALYSIS
DATA ANALYSIS

There has been a common understanding that newspapers these days provide a generous space to environment related news. So the researcher undertook an Analysis of Variance Test to conclude whether it is really the case in relation to other variables of the study.

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TPS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>1578914262.670</td>
<td>323</td>
<td>4888279.451</td>
<td>1.376</td>
<td>.019</td>
</tr>
<tr>
<td>Within Groups</td>
<td>454810595.000</td>
<td>128</td>
<td>3553207.773</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2033724857.670</td>
<td>451</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>1413847.716</td>
<td>323</td>
<td>4377.238</td>
<td>.712</td>
<td>.991</td>
</tr>
<tr>
<td>Within Groups</td>
<td>786879.767</td>
<td>128</td>
<td>6147.498</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2200727.482</td>
<td>451</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table: 5.1

The researcher at first conducted an ANOVA test between Total Print Space of all newspapers under research scheme, i.e. The Telegraph, The Indian Express and The Times of India. The editions under considerations respectively were Kolkata and Guwahati for The Telegraph, Delhi for Indian Express, and Kolkata, Mumbai and Guwahati for The Times of India. All newspapers had to be taken together because the number of news items were too low in each newspaper to be considered individually and that might have led to the problem of fewer degrees of freedom. Analysis reveals that the existence of environmental news items is thoroughly insignificant as the F statistics for EN(environmental news and environmental photos taken together) vis-à-vis Total Print Space stand at 0.712, far below the level of significance. This score is valid at 99% level, i.e. the score is valid for every 99 newspapers out of 100 newspapers during the sample period.

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>376735.623</td>
<td>92</td>
<td>4094.952</td>
<td>806</td>
<td>.894</td>
</tr>
<tr>
<td>Within Groups</td>
<td>1830097.606</td>
<td>360</td>
<td>5083.604</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2206833.228</td>
<td>452</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSH</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>629612720.234</td>
<td>92</td>
<td>6843616.524</td>
<td>14.980</td>
<td>.000</td>
</tr>
<tr>
<td>Within Groups</td>
<td>164006542.321</td>
<td>359</td>
<td>456842.736</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>793619262.555</td>
<td>451</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table: 5.2

= 123 =
The ANOVA Test result for Environmental News, EN,( Environmental News and Environmental Photos taken together) and CSH(Comic strip, Horoscope, Letters to the Editor, and advertisements, both classified and display) reveal almost the same pattern. Here also all newspapers, i.e. The Telegraph, The Indian Express and The Times of India were taken together to assess the significance of environmental news in relation with other variables. The $F$ statistics for Environmental News vis-à-vis CSH stands at 0.806 which is insignificant as the ANOVA table reveals. The $F$ score of CSH is 14.980 and stands significant at 0.0% level. The result shows that advertisements have the highest importance level so far as the newspapers existence is concerned.

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN</td>
<td>Between Groups</td>
<td>376735.623</td>
<td>92</td>
<td>4094.952</td>
<td>.806</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>1830097.606</td>
<td>360</td>
<td>5083.604</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2206833.228</td>
<td>452</td>
<td>10127617.670</td>
<td></td>
</tr>
<tr>
<td>SFN</td>
<td>Between Groups</td>
<td>931740825.662</td>
<td>92</td>
<td>10127617.670</td>
<td>20.440</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>177877001.813</td>
<td>359</td>
<td>495479.114</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1109617827.476</td>
<td>451</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table: 5.3

An ANOVA Test was also conducted to find out the relative significance of Environmental News, EN(environmental news and environmental photos taken together) in comparison with SFN(Space for News only). The test reveals equally depressing picture as EN was found to be insignificant with an $F$ statistics of 0.806 vis-a-vis SFN. SFN is basically the accumulation of all news items in the newspapers excluding Environmental News and Photos. SFN was found after deducting the space given to CSH(Letters to the Editor, Comic Strip, Horoscope, Advertising Space,) from Total Print Space of the newspapers, i.e. the space from below the Masthead to the borderline in the lower half of the newspapers. SFN quite expectedly stands significant at 20.440 at 0% level implying validity in 100 newspapers out of 100 newspapers of the sample period.
A Chi-square test was undertaken to ascertain the frequency of appearance of Environmental News and Photos together in the three newspapers under discussion. The number of stories and the space awarded to them during the study period were put together for each newspaper and were calculated against Space for News (SFN) to find out whether compared to other news items in the newspapers put together, Environmental News (EN) has got a specific and frequent existence or not.

<table>
<thead>
<tr>
<th>Year</th>
<th>SFN as a % of TPS</th>
<th>EN as a % of SFN</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>68.76*</td>
<td>0.56</td>
</tr>
<tr>
<td>2004</td>
<td>64.99*</td>
<td>0.14</td>
</tr>
<tr>
<td>2005</td>
<td>51.86*</td>
<td>1.75</td>
</tr>
<tr>
<td>2006</td>
<td>46.05*</td>
<td>1.48</td>
</tr>
<tr>
<td>2007</td>
<td>65.25*</td>
<td>0.69</td>
</tr>
</tbody>
</table>

Table: 5.4 The Indian Express
[Note: * implies the value is significant at 1 percent level (The table value of Chi-square with 1 degree of freedom for 1, 5 and 10 percent level of significance is 10.88, 5.02 and 2.71 respectively)]

The result of Chi-square test as revealed by Table 5.4 is that the frequency of appearance of EN (Environmental News and Environmental Photos taken together) vis-à-vis total space awarded to news only (SFN) is insignificant in all the years during the period of study at 1.5 and 10 percent level of significance with 1 degree of freedom. The table rather reveals the relative fluctuation of space given to Advertising space, comic strip, horoscope, letters to the editor because SFN is the space one gets by deducting CSH (advertising space, comic strip, horoscope, letters to the editor) from Total Print Space (TPS). One has to remember that space given to especially comic strip, horoscope and letters to the editor remain static in the newspaper with minor variation in letters to the editor space while there is always a great deal of variation in advertising space. The fluctuations in the second column are largely the outcome of variations in the advertisement space depending on the newspaper’s ability to arrange advertising revenue.

<table>
<thead>
<tr>
<th>Year</th>
<th>SFN as a % of TPS</th>
<th>EN as a % of SFN</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>58.52*</td>
<td>0.40</td>
</tr>
<tr>
<td>2004</td>
<td>62.99*</td>
<td>0.63</td>
</tr>
<tr>
<td>2005</td>
<td>55.37*</td>
<td>0.48</td>
</tr>
<tr>
<td>2006</td>
<td>58.95*</td>
<td>0.27</td>
</tr>
<tr>
<td>2007</td>
<td>57.90*</td>
<td>0.24</td>
</tr>
</tbody>
</table>

Table: 5.5 The Telegraph
The Chi-square Test for The Telegraph reveals almost the same trend. Environmental News or EN is insignificant vis-à-vis SFN or Space for News at 1, 5 and 10 percent level of significance with 1 degree of freedom. In case of The Telegraph the EN has much lower percentage of space for news as compared to The Indian Express. The figures in the second column of graph 5.5 also reveals that The Telegraph, irrespective of where it is being published from, tends to have almost the same percentage of advertising revenue as the researcher has already mentioned that Space for News or SFN is what one gets after deducting CSH mentioned earlier as the sum total of space given to advertising, comic strip, horoscope and letters to the editor from Total Print Space.

<table>
<thead>
<tr>
<th>Year</th>
<th>SFN as a % of TPS</th>
<th>EN as a % of TSN</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>46.87*</td>
<td>0.78</td>
</tr>
<tr>
<td>2004</td>
<td>52.45*</td>
<td>2.18</td>
</tr>
<tr>
<td>2005</td>
<td>61.90*</td>
<td>0.71</td>
</tr>
<tr>
<td>2006</td>
<td>46.15*</td>
<td>0.42</td>
</tr>
<tr>
<td>2007</td>
<td>40.09*</td>
<td>0.60</td>
</tr>
</tbody>
</table>

Table: 5.6 The Times of India
[Note: * implies the value is significant at 1 percent level (The table value of Chi-square with 1 degree of freedom for 1, 5 and 10 percent level of significance is 10.88, 5.02 and 2.71 respectively)]

In case of The Times of India, the frequency of Environmental News or EN remains insignificant as well vis-à-vis SFN or Space for News at 1,5 and 10 percent level with 1 degree of freedom. In case of The Times of India, only in 2004 the frequency of EN comes quite close to level of significance which implies a slight better coverage pattern than other two newspapers under consideration.
CORRELATION TEST

The collected data was put to a Correlation Test. The result of the Correlation Test reveals some interesting facts on a year to year basis.

For the purpose of correlation, the entire newspaper space and content were divided into five variables. They are namely:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSH</td>
<td>Advertisement, Comic strips, Cartoons, Horoscope section, Letters to the Editor.</td>
</tr>
<tr>
<td>SFN</td>
<td>Space for News. It was brought out by subtracting CSH from total Print space.</td>
</tr>
<tr>
<td>TPS</td>
<td>Total Print space, which is the addition of CSH and SFN.</td>
</tr>
<tr>
<td>ES</td>
<td>Environmental stories.</td>
</tr>
<tr>
<td>EP</td>
<td>Environmental Photographs. Sometimes they didn’t have any story tagged with.</td>
</tr>
</tbody>
</table>

The years under discussion were as has already been mentioned 2003 – 2007. Newspapers under discussion were The Times of India, The Indian Express, The Telegraph. For the purpose of Correlation and Regression and other data table and graph they have been mentioned as TOI, IE and TT respectively.

Year 2003: The Times of India

<table>
<thead>
<tr>
<th></th>
<th>CSH</th>
<th>SFN</th>
<th>EP</th>
<th>ES</th>
<th>TPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSH</td>
<td>1.00</td>
<td>0.92</td>
<td>0.05</td>
<td>-0.19</td>
<td>0.62</td>
</tr>
<tr>
<td>SFN</td>
<td>0.92</td>
<td>1.00</td>
<td>0.10</td>
<td>-0.15</td>
<td>0.41</td>
</tr>
<tr>
<td>EP</td>
<td>0.05</td>
<td>0.10</td>
<td>1.00</td>
<td>0.15</td>
<td>-0.13</td>
</tr>
<tr>
<td>ES</td>
<td>-0.19</td>
<td>-0.15</td>
<td>0.15</td>
<td>1.00</td>
<td>-0.20</td>
</tr>
<tr>
<td>TPS</td>
<td>0.62</td>
<td>0.41</td>
<td>-0.13</td>
<td>-0.20</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Table 5.7

In the year 2003, the correlation of the variables of The Times of India reveals that there was a positive correlation between the share of advertisements and Total Print space. If total print space increases, advertisements also increase. Or to put it otherwise, newspaper managers increase the number of pages if only there is a spurt in advertisements. Space for Advertisement is also positively correlated with Space for News. It is likely because the whole increase in the space may not go directly to advertisement alone. In the same table, the most interesting fact is Environmental News
bear a negative correlation with all three important variables like Space for News, Advertisement space and Total Print Space. It means that if there is an increase in Ad space, Total Print space and Space for News, there will be a reduction in environmental stories. The correlation level is not significant, which means that it cannot be ascertain the percentage of reduction, but it has been statistically proved that Environmental Stories decline with the rise in other three important factors of a newspaper. Obviously this is not a very positive indicator, but one has to remember that this phenomenon is limited to one year.

### Year 2004: The Times of India

<table>
<thead>
<tr>
<th></th>
<th>CSH</th>
<th>SFN</th>
<th>EP</th>
<th>ES</th>
<th>TPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSH</td>
<td>1.00</td>
<td>0.68</td>
<td>0.12</td>
<td>0.36</td>
<td>0.92</td>
</tr>
<tr>
<td>SFN</td>
<td>0.68</td>
<td>1.00</td>
<td>0.01</td>
<td>0.11</td>
<td>0.92</td>
</tr>
<tr>
<td>EP</td>
<td>0.12</td>
<td>0.01</td>
<td>1.00</td>
<td>0.76</td>
<td>0.07</td>
</tr>
<tr>
<td>ES</td>
<td>0.36</td>
<td>0.11</td>
<td>0.76</td>
<td>1.00</td>
<td>0.26</td>
</tr>
<tr>
<td>TPS</td>
<td>0.92</td>
<td>0.92</td>
<td>0.07</td>
<td>0.26</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Table 5.8

In 2004, TOI shows only one positive indication. There is no negative correlation between the variables but at the same time there is no positive significant correlation between Environmental Stories or Environmental Pictures with Space for News, Advertisement Space and Total Print Space. But, at the same time, Space for News, Ad Space and Total Print Space are positively and significantly correlated, which, in a layman’s language means, if there is an increase in any of the three, there would be an increase in the rest two.

### Year 2005: The Times of India

<table>
<thead>
<tr>
<th></th>
<th>CSH</th>
<th>SFN</th>
<th>EP</th>
<th>ES</th>
<th>TPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSH</td>
<td>1.00</td>
<td>0.96</td>
<td>0.30</td>
<td>0.40</td>
<td>0.98</td>
</tr>
<tr>
<td>SFN</td>
<td>0.96</td>
<td>1.00</td>
<td>0.27</td>
<td>0.32</td>
<td>0.99</td>
</tr>
<tr>
<td>EP</td>
<td>0.30</td>
<td>0.27</td>
<td>1.00</td>
<td>0.73</td>
<td>0.29</td>
</tr>
<tr>
<td>ES</td>
<td>0.40</td>
<td>0.32</td>
<td>0.73</td>
<td>1.00</td>
<td>0.36</td>
</tr>
<tr>
<td>TPS</td>
<td>0.98</td>
<td>0.99</td>
<td>0.29</td>
<td>0.36</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Table 5.9

In 2005, the picture remains the same for TOI, Environmental Stories have got no significant correlation with other variables. Taken together, Environmental stories and pictures, represent a positive significant correlation with other three variables. Taken together, these two show that there would be an increase in environment related content if there is an increase in the space for news, or total print space and Ad space.
### Year 2006: The Times of India

<table>
<thead>
<tr>
<th></th>
<th>CSH</th>
<th>SFN</th>
<th>EP</th>
<th>ES</th>
<th>TPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSH</td>
<td>1.00</td>
<td>0.90</td>
<td>0.15</td>
<td>0.15</td>
<td>0.98</td>
</tr>
<tr>
<td>SFN</td>
<td>0.90</td>
<td>1.00</td>
<td>0.02</td>
<td>0.05</td>
<td>0.97</td>
</tr>
<tr>
<td>EP</td>
<td>0.15</td>
<td>0.02</td>
<td>1.00</td>
<td>0.74</td>
<td>0.10</td>
</tr>
<tr>
<td>ES</td>
<td>0.15</td>
<td>0.05</td>
<td>0.74</td>
<td>1.00</td>
<td>0.12</td>
</tr>
<tr>
<td>TPS</td>
<td>0.98</td>
<td>0.97</td>
<td>0.10</td>
<td>0.12</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Table 5.10

In 2006, in its Mumbai edition also, Environmental News is not significantly correlated with either Space for News or Total Print Space.

### Year 2007: The Times of India

<table>
<thead>
<tr>
<th></th>
<th>CSH</th>
<th>SFN</th>
<th>EP</th>
<th>ES</th>
<th>TPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSH</td>
<td>1.00</td>
<td>0.02</td>
<td>-0.03</td>
<td>-0.07</td>
<td>0.93</td>
</tr>
<tr>
<td>SFN</td>
<td>0.02</td>
<td>1.00</td>
<td>0.05</td>
<td>-0.07</td>
<td>0.38</td>
</tr>
<tr>
<td>EP</td>
<td>-0.03</td>
<td>0.05</td>
<td>1.00</td>
<td>0.67</td>
<td>-0.01</td>
</tr>
<tr>
<td>ES</td>
<td>-0.07</td>
<td>-0.07</td>
<td>0.67</td>
<td>1.00</td>
<td>-0.10</td>
</tr>
<tr>
<td>TPS</td>
<td>0.93</td>
<td>0.38</td>
<td>-0.01</td>
<td>-0.10</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Table 5.11

In 2007, Guwahati edition of TOI, which caters to the environmentally fragile, Northeastern part of India, the picture was almost horrible. Both Environmental Stories and environmental pictures are negatively correlated with Total Print Space and Environmental Stories and Environmental Pictures were negatively correlated with both Space for News and Advertising Space.

### Year 2003: The Telegraph

<table>
<thead>
<tr>
<th></th>
<th>CSH</th>
<th>SFN</th>
<th>EP</th>
<th>ES</th>
<th>TPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSH</td>
<td>1.00</td>
<td>-0.49</td>
<td>0.27</td>
<td>0.10</td>
<td>0.69</td>
</tr>
<tr>
<td>SFN</td>
<td>-0.49</td>
<td>1.00</td>
<td>-0.11</td>
<td>-0.08</td>
<td>0.29</td>
</tr>
<tr>
<td>EP</td>
<td>0.27</td>
<td>-0.11</td>
<td>1.00</td>
<td>0.45</td>
<td>0.20</td>
</tr>
<tr>
<td>ES</td>
<td>0.10</td>
<td>-0.08</td>
<td>0.45</td>
<td>1.00</td>
<td>0.05</td>
</tr>
<tr>
<td>TPS</td>
<td>0.69</td>
<td>0.29</td>
<td>0.20</td>
<td>0.05</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Table 5.12

In 2003, The Telegraph shows a negative but insignificant correlation of Environmental News with Space for News excluding picture. In the same year, The Telegraph shows a negative correlation between Ad space and Space for News. The Telegraph, if required, sacrificed not only environment but also other news items for advertisement. But there is a positive correlation between Total print Space and Advertising Space which implies that newspaper's page would increase only if there is an increase in advertising and the whole increase could be dedicated to advertisement.
Year 2004: The Telegraph

<table>
<thead>
<tr>
<th></th>
<th>CSH</th>
<th>SFN</th>
<th>EP</th>
<th>ES</th>
<th>TPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSH</td>
<td>1.00</td>
<td>-0.47</td>
<td>-0.44</td>
<td>-0.42</td>
<td>-0.03</td>
</tr>
<tr>
<td>SFN</td>
<td>-0.47</td>
<td>1.00</td>
<td>0.32</td>
<td>0.36</td>
<td>0.89</td>
</tr>
<tr>
<td>EP</td>
<td>-0.44</td>
<td>0.32</td>
<td>1.00</td>
<td>0.86</td>
<td>0.14</td>
</tr>
<tr>
<td>ES</td>
<td>-0.42</td>
<td>0.36</td>
<td>0.86</td>
<td>1.00</td>
<td>0.20</td>
</tr>
<tr>
<td>TPS</td>
<td>-0.03</td>
<td>0.89</td>
<td>0.14</td>
<td>0.20</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Table 5.13

In 2004, also, a significant trend is noticed in The Telegraph. Environment Stories and Environmental Pictures are negatively correlated with Ad Space, and if taken together, Environment related content is quite significantly correlated with Ad Space. At the same time Space for News is negatively correlated with Ad space. Environmental Stories and Pictures in isolation have no correlation with either Total Print Space or Space for News. Another important aspect is Total Print Space is also negatively but insignificantly correlated with Ad Space.

Year 2005: The Telegraph

<table>
<thead>
<tr>
<th></th>
<th>CSH</th>
<th>SFN</th>
<th>EP</th>
<th>ES</th>
<th>TPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSH</td>
<td>1.00</td>
<td>0.26</td>
<td>-0.07</td>
<td>0.02</td>
<td>0.70</td>
</tr>
<tr>
<td>SFN</td>
<td>0.26</td>
<td>1.00</td>
<td>-0.20</td>
<td>-0.07</td>
<td>0.87</td>
</tr>
<tr>
<td>EP</td>
<td>-0.07</td>
<td>-0.20</td>
<td>1.00</td>
<td>0.73</td>
<td>-0.16</td>
</tr>
<tr>
<td>ES</td>
<td>0.02</td>
<td>-0.07</td>
<td>0.73</td>
<td>1.00</td>
<td>-0.01</td>
</tr>
<tr>
<td>TPS</td>
<td>0.70</td>
<td>0.87</td>
<td>-0.16</td>
<td>-0.01</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Table : 5.14

In 2005, there was no significant correlation among the variables but Environmental stories and Environmental Pictures are negatively correlated with Space for News as well as Total print Space. But in both cases, the correlation indicators are insignificant.

Year 2006: The Telegraph

<table>
<thead>
<tr>
<th></th>
<th>CSH</th>
<th>SFN</th>
<th>EP</th>
<th>ES</th>
<th>TPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSH</td>
<td>1.00</td>
<td>0.07</td>
<td>-0.03</td>
<td>-0.14</td>
<td>0.69</td>
</tr>
<tr>
<td>SFN</td>
<td>0.07</td>
<td>1.00</td>
<td>0.29</td>
<td>0.35</td>
<td>0.76</td>
</tr>
<tr>
<td>EP</td>
<td>-0.03</td>
<td>0.29</td>
<td>1.00</td>
<td>0.28</td>
<td>0.20</td>
</tr>
<tr>
<td>ES</td>
<td>-0.14</td>
<td>0.35</td>
<td>0.28</td>
<td>1.00</td>
<td>0.17</td>
</tr>
<tr>
<td>TPS</td>
<td>0.69</td>
<td>0.76</td>
<td>0.20</td>
<td>0.17</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Table : 5.15

In 2006, again Kolkata edition, Environmental Stories and Environmental Pictures are having a negative correlation with Advertising Space, but the correlation is not significant. Advertisement
Space and Total Print Space are positively correlated and Space for News is also positively correlated with Total Print Space. But there is no significant correlation between Advertising Space and Space for News.

### Year 2007: The Telegraph

<table>
<thead>
<tr>
<th></th>
<th>CSH</th>
<th>SFN</th>
<th>EP</th>
<th>ES</th>
<th>TPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSH</td>
<td>1.00</td>
<td>-0.66</td>
<td>-0.14</td>
<td>-0.09</td>
<td>0.17</td>
</tr>
<tr>
<td>SFN</td>
<td>-0.66</td>
<td>1.00</td>
<td>0.09</td>
<td>0.20</td>
<td>0.52</td>
</tr>
<tr>
<td>EP</td>
<td>-0.14</td>
<td>0.09</td>
<td>1.00</td>
<td>0.81</td>
<td>-0.01</td>
</tr>
<tr>
<td>ES</td>
<td>-0.09</td>
<td>0.20</td>
<td>0.81</td>
<td>1.00</td>
<td>0.24</td>
</tr>
<tr>
<td>TPS</td>
<td>0.17</td>
<td>0.52</td>
<td>-0.01</td>
<td>0.24</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Table: 5.16

In 2007, in its Northeast edition, Space for News, Environmental Stories and Environmental Pictures are negatively correlated with Advertising Space. Among these, the negative correlation between Space for News and Advertising Space is significant and the probable explanation could be that since Northeast is financially also not very strong, the newspaper found it convenient to sacrifice news space for advertising to keep the edition financially viable. There is no correlation between Ad Space and Total Print Space and in the same way no significant correlation among Space for News, Environmental Stories and Environmental Pictures. But there is an insignificant negative correlation between Total Print Space and Environmental Pictures.

### Year 2003: The Indian Express

<table>
<thead>
<tr>
<th></th>
<th>CSH</th>
<th>SFN</th>
<th>EP</th>
<th>ES</th>
<th>TPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSH</td>
<td>1.00</td>
<td>-0.15</td>
<td>0.01</td>
<td>0.03</td>
<td>0.60</td>
</tr>
<tr>
<td>SFN</td>
<td>-0.15</td>
<td>1.00</td>
<td>-0.13</td>
<td>-0.17</td>
<td>0.70</td>
</tr>
<tr>
<td>EP</td>
<td>0.01</td>
<td>-0.13</td>
<td>1.00</td>
<td>0.72</td>
<td>-0.10</td>
</tr>
<tr>
<td>ES</td>
<td>0.03</td>
<td>-0.17</td>
<td>0.72</td>
<td>1.00</td>
<td>-0.12</td>
</tr>
<tr>
<td>TPS</td>
<td>0.60</td>
<td>0.70</td>
<td>-0.10</td>
<td>-0.12</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Table: 5.17

In case of The Indian Express, perhaps the most significant participant in the Save Environment Movement in India among the newspapers, the picture in 2003 was less than encouraging. The correlation test shows a negative but insignificant correlation between Space for News and Advertising Space. But there is a positive correlation between Total Print Space and Advertising Space which implies that Indian Express increases its pages only when there is an additional bounty of advertisement. It was found out during content scan that The Indian Express, though a leading
national daily, gets much less advertisement compared to The Times of India. The important fact is that if there is an increase in Space for News or Total print Space, the space given to Environmental News and Environmental Photographs decreases. So that was not a very healthy sign for environmental consciousness.

### Year 2004: The Indian Express

<table>
<thead>
<tr>
<th></th>
<th>CSH</th>
<th>SFN</th>
<th>EP</th>
<th>ES</th>
<th>TPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSH</td>
<td>1.00</td>
<td>-0.10</td>
<td>0.20</td>
<td>0.11</td>
<td>0.56</td>
</tr>
<tr>
<td>SFN</td>
<td>-0.10</td>
<td>1.00</td>
<td>-0.05</td>
<td>-0.05</td>
<td>0.76</td>
</tr>
<tr>
<td>EP</td>
<td>0.20</td>
<td>-0.05</td>
<td>1.00</td>
<td>0.57</td>
<td>0.09</td>
</tr>
<tr>
<td>ES</td>
<td>0.11</td>
<td>-0.05</td>
<td>0.57</td>
<td>1.00</td>
<td>0.03</td>
</tr>
<tr>
<td>TPS</td>
<td>0.56</td>
<td>0.76</td>
<td>0.09</td>
<td>0.03</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Table: 5.18

In 2004, it shows almost the same trend. There was a significant correlation between Advertising Space and Total Print Space. But there was an additional healthy sign, this year The Indian Express marked a positive significant correlation between Total Print Space and Space for News. One has to remember that this was the year of last general election in the country, so The Indian Express accommodated some news also in the increased space. But, so far as Environmental News and Environmental Pictures are concerned, they continued to maintain an insignificant negative correlation with Space for News.

### Year 2005: The Indian Express

<table>
<thead>
<tr>
<th></th>
<th>CSH</th>
<th>SFN</th>
<th>EP</th>
<th>ES</th>
<th>TPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSH</td>
<td>1.00</td>
<td>-0.45</td>
<td>-0.17</td>
<td>0.05</td>
<td>0.00</td>
</tr>
<tr>
<td>SFN</td>
<td>-0.45</td>
<td>1.00</td>
<td>-0.08</td>
<td>-0.32</td>
<td>0.85</td>
</tr>
<tr>
<td>EP</td>
<td>-0.17</td>
<td>-0.08</td>
<td>1.00</td>
<td>0.05</td>
<td>-0.15</td>
</tr>
<tr>
<td>ES</td>
<td>0.05</td>
<td>-0.32</td>
<td>0.05</td>
<td>1.00</td>
<td>-0.02</td>
</tr>
<tr>
<td>TPS</td>
<td>0.00</td>
<td>0.85</td>
<td>-0.15</td>
<td>-0.02</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Table: 5.19

In 2005, again Indian Express continues to maintain an insignificant negative correlation among Space for News, Environmental Stories and Environmental Pictures. There is a significant positive correlation between Space for News and Total Print Space. The important issue was Total Print Space was negatively correlated with both Environmental Stories and Environmental Pictures. But at the same time, like 2003, The Indian Express shows a negative but insignificant correlation between Space for News and Advertising Space.
In 2006, there is no negative correlation between Space for News and Advertisement Space, neither any significant positive correlation also. The correlation chart reveals that if there is an increase in Total Print Space, there will be an increase in Space for News. Environmental stories and Environmental photographs registered a negative and insignificant correlation with Space for News. Total Print Space and Space for Advertising are positively correlated implying a growth in one would result in growth in another.

In 2007, again, Environmental stories, Environmental Pictures and Space for News all show a negative but, insignificant correlations with Advertisement Space. There was a positive significant correlation between Space for News and Total Print Space while on the other hand there existed a positive and significant correlation between Advertising space and Total News Space.

In all three newspapers, never a negative correlation was found between Environmental Stories and Environmental Photographs. That was unlikely, but it should be mentioned in this context that there was sometimes no significant positive correlations also found between the two.
REGRESSION ANALYSIS

A Regression Analysis Test was undertaken to ascertain how far environmental news would increase or decrease if there were some additional space in the newspapers under consideration. The space for EN (environmental news and photos together) was put to regression analysis to find out their relative importance vis-a-vis Total Print Space and Space for News. Regression Analysis, being a parametric test, was employed to find out to determine the exact degree of relative importance of environmental news in The Times of India, The Indian Express and The Telegraph. All the results found are significant at 0% level, i.e. they hold true for all newspaper samples under discussion during the period of study.

THE TELEGRAPH- 03-07

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOG(TPS)</td>
<td>0.406642</td>
<td>0.019441</td>
<td>20.91677</td>
<td>0.0000</td>
</tr>
<tr>
<td>AR(1)</td>
<td>0.115312</td>
<td>0.159286</td>
<td>0.723929</td>
<td>0.4796</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.037514</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>-0.022642</td>
<td>0.159286</td>
<td>0.723929</td>
<td>0.4796</td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>0.535641</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sum squared resid</td>
<td>4.590585</td>
<td>3.777061</td>
<td>0.5923</td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-13.24362</td>
<td>0.793527</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inverted AR Roots</td>
<td>.12</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table: 5.22

In case of The Telegraph where two editions, namely Calcutta and Guwahati editions were taken into account, the regression analysis shows some variations when editions were taken in isolation and when taken together. Both editions of The Telegraph taken together show an increase of 40% of existing Environmental News and Pictures if there is an increase of 100% in Total Print space of The Telegraph.

THE TELEGRAPH- 03-06

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOG(TPS)</td>
<td>0.410634</td>
<td>0.019755</td>
<td>20.78581</td>
<td>0.0000</td>
</tr>
<tr>
<td>AR(1)</td>
<td>0.087940</td>
<td>0.160734</td>
<td>0.547115</td>
<td>0.5923</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.016095</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>-0.049499</td>
<td>0.160734</td>
<td>0.547115</td>
<td>0.5923</td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>0.535641</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sum squared resid</td>
<td>4.451488</td>
<td>1.733196</td>
<td>1.831221</td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-12.73217</td>
<td>0.763204</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inverted AR Roots</td>
<td>.09</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table: 5.23

= 134 =
Taken in isolation, Kolkata edition of the Telegraph over the period of four years, 2003-06, registers an increase of 47% Environmental News if Total Print Space registers an increase of 100%. Putting it in a simpler term, if on an average day, The Telegraph in its Kolkata edition Printed a 48 pages newspaper instead of 24 pages, as was its tradition, it would be able to accommodate 41% more environment related items than what it printed during the study period normally.

**THE TELEGRAPH: 2007**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOG(TPS)</td>
<td>0.426227</td>
<td>0.029516</td>
<td>14.44033</td>
<td>0.0000</td>
</tr>
<tr>
<td>R-squared</td>
<td>-0.027721</td>
<td>Mean dependent var</td>
<td>3.874634</td>
<td></td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>-0.027721</td>
<td>S.D. dependent var</td>
<td>0.648114</td>
<td></td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>0.657035</td>
<td>Akaike info criterion</td>
<td>2.148854</td>
<td></td>
</tr>
<tr>
<td>Sum squared resid</td>
<td>2.158478</td>
<td>Schwarz criterion</td>
<td>2.114148</td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-5.446563</td>
<td>Durbin-Watson stat</td>
<td>0.055968</td>
<td></td>
</tr>
</tbody>
</table>

In case of Guwahati edition of The Telegraph, it has a slightly better trend perhaps owing to the fact that destruction of environment is such a common occurrence in the Northeast that one doesn’t have to fight hard to get environment related news. Guwahati edition of The Telegraph registers a growth of 42% if there is an 100% increase in Total Print space of The Telegraph coming out from Guwahati.

The Researcher had taken three different editions of The Times of India, namely Calcutta, Mumbai and Guwahati to track the trends of environment news coverage to ascertain whether there was a similar trend in all the editions of TOI, unquestionably the most important newspaper in terms of circulation in India.

**THE TIMES OF INDIA: 03-07**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOG(TPS)</td>
<td>0.482702</td>
<td>0.023389</td>
<td>20.63801</td>
<td>0.0000</td>
</tr>
<tr>
<td>AR(1)</td>
<td>0.502094</td>
<td>0.139136</td>
<td>3.608660</td>
<td>0.0011</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.287962</td>
<td>Mean dependent var</td>
<td>4.343287</td>
<td></td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.264993</td>
<td>S.D. dependent var</td>
<td>0.707435</td>
<td></td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>0.606502</td>
<td>Akaike info criterion</td>
<td>1.896474</td>
<td></td>
</tr>
<tr>
<td>Sum squared resid</td>
<td>11.40318</td>
<td>Schwarz criterion</td>
<td>1.987171</td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-29.29182</td>
<td>Durbin-Watson stat</td>
<td>1.787043</td>
<td></td>
</tr>
</tbody>
</table>

Inverted AR Roots .50

Table: 5.24

Table: 5.25

= 135 =
The regression analysis shows that The Times of India over a span of five years and all thee editions taken together, shows a likely growth of environment news by 48% if there is an increase of Total Print Space by 100%.

**THE TIMES OF INDIA: 03-05**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOG(TPS)</td>
<td>0.48289</td>
<td>0.011433</td>
<td>42.23608</td>
<td>0.0000</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.012812</td>
<td>4.374086</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.012812</td>
<td>0.714704</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>0.710111</td>
<td>0.714704</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sum squared resid</td>
<td>23.19584</td>
<td>2.174256</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-50.09501</td>
<td>0.940502</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table: 5.26

In its Kolkata edition, The Times of India’s regression coefficient is 48%, implying a 48% growth in TOI’s existing environment news if there was an increase of 100% in its Total Print Space.

**THE TIMES OF INDIA: 06**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOG(TPS)</td>
<td>0.489200</td>
<td>0.022752</td>
<td>21.50098</td>
<td>0.0000</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.025502</td>
<td>4.425222</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.025502</td>
<td>0.467766</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>0.461763</td>
<td>1.469327</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sum squared resid</td>
<td>0.852901</td>
<td>1.391215</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-2.673318</td>
<td>3.856713</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table: 5.27

The Mumbai edition of The Times of India shows almost the same trend. It would have 48% more environmental news items that what it had during the study period in 2006 if the pages on any day of its Mumbai editions were doubled.

= 136 =
THE TIMES OF INDIA: 2007

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOG(TPS)</td>
<td>0.417985</td>
<td>0.015339</td>
<td>27.25062</td>
<td>0.0000</td>
</tr>
<tr>
<td>R-squared</td>
<td>-0.288626</td>
<td>Mean dependent var</td>
<td>3.709505</td>
<td></td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>-0.288626</td>
<td>S.D dependent var</td>
<td>0.414713</td>
<td></td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>0.470772</td>
<td>Akaike info criterion</td>
<td>1.410771</td>
<td></td>
</tr>
<tr>
<td>Sum squared resid</td>
<td>2.437893</td>
<td>Schwarz criterion</td>
<td>1.451180</td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-7.464628</td>
<td>Durbin-Watson stat</td>
<td>0.538298</td>
<td></td>
</tr>
</tbody>
</table>

Table: 5.28

But so far, as the Guwahati edition is concerned, The Times of India, otherwise alive to the need of coverage of environment related news, shows a different approach to perhaps one of the most important aspects of Northeast, and that is its environment. The regression analysis reveals that the Guwahati edition of The Times of India will accommodate 41% more environment related news items if there was an 100% increase in Total Print Space of The Times of India, Guwahati edition, which was far below their national average of 48%.

THE INDIAN EXPRESS-2003-07

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOG(TPS)</td>
<td>0.485311</td>
<td>0.014717</td>
<td>32.97694</td>
<td>0.0000</td>
</tr>
<tr>
<td>AR(1)</td>
<td>-0.385888</td>
<td>0.138789</td>
<td>-2.780397</td>
<td>0.0115</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.037575</td>
<td>Mean dependent var</td>
<td>4.362094</td>
<td></td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>-0.010546</td>
<td>S.D dependent var</td>
<td>0.853424</td>
<td></td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>0.857912</td>
<td>Akaike info criterion</td>
<td>2.617878</td>
<td></td>
</tr>
<tr>
<td>Sum squared resid</td>
<td>14.72027</td>
<td>Schwarz criterion</td>
<td>2.717064</td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-26.79666</td>
<td>Durbin-Watson stat</td>
<td>1.410076</td>
<td></td>
</tr>
<tr>
<td>Inverted AR Roots</td>
<td>-.39</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table: 5.29

A regression analysis of the Total Print Space related data and Environmental news related data of five years shows that in case of The Indian Express, if there was an increase of 1 (One) in Total Print Space of newspaper, there would be an increase of 0.48 of in its existing pool of Environment News. To put it in simpler terms, if on an average day, Indian Express Delhi Edition increased its pages from normal 16 Pages to 32 Pages, it would have nearly 48% more environmental news than what it printed in a 16 page newspaper during the period of study.

= 137 =
Total News Paper Samples, TOI+TEL+IE (EN-TPS) 03-07

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOG(TPS)</td>
<td>0.462519</td>
<td>0.012337</td>
<td>37.49187</td>
<td>0.0000</td>
</tr>
<tr>
<td>AR(1)</td>
<td>0.190341</td>
<td>0.112928</td>
<td>1.685504</td>
<td>0.0963</td>
</tr>
<tr>
<td>R-squared</td>
<td>-0.014079</td>
<td>Mean</td>
<td></td>
<td>4.209337</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>-0.028362</td>
<td>S.D. dependent var</td>
<td>0.750447</td>
<td></td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>0.761015</td>
<td>Akaike info criterion</td>
<td>2.318688</td>
<td></td>
</tr>
<tr>
<td>Sum squared resid</td>
<td>41.11922</td>
<td>Schwarz criterion</td>
<td>2.381440</td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-82.63211</td>
<td>Durbin-Watson stat</td>
<td>1.232483</td>
<td></td>
</tr>
</tbody>
</table>

Inverted AR Roots: 0.19

Table: 5.30

When all the sample news items collected during the study period were put to regression test, the regression coefficient turned out to be 46. This parametric test reveals that all newspapers under the discussion, namely, The Times of India, The Indian Express and The Telegraph, irrespective of their editions would have 46% more space for Environmental News than what it printed during the study period if there was an increase of 100% in their Total Print Space.

Total News Paper Sample TOI+TEL+IE (EN-FSN): 03-07

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOG(SFN)</td>
<td>0.499279</td>
<td>0.006951</td>
<td>71.82795</td>
<td>0.0000</td>
</tr>
<tr>
<td>R-squared</td>
<td>-0.087281</td>
<td>Mean</td>
<td></td>
<td>4.219837</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>-0.087281</td>
<td>S.D. dependent var</td>
<td>0.705106</td>
<td></td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>0.735234</td>
<td>Akaike info criterion</td>
<td>2.229093</td>
<td></td>
</tr>
<tr>
<td>Sum squared resid</td>
<td>84.32877</td>
<td>Schwarz criterion</td>
<td>2.248560</td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-173.9838</td>
<td>Durbin-Watson stat</td>
<td>1.868441</td>
<td></td>
</tr>
</tbody>
</table>

Table: 5.31

A regression analysis of all the sample news items published in the newspapers under discussion during the study period, i.e. 2003-07 show that if there was an 100% increase in the Space for News in all the three newspapers, i.e. The Times of India, The Indian Express and The Telegraph, there would have been a 49% increase in the Space for Environmental News that was given to it during the study period.
THE TELEGRAPH: 03-07

Table 5.32

Taking into consideration all the news items published in The Telegraph during the study period irrespective of editions, it can be surmised on the basis of regression analysis that there would be an increase of 46% in the space given to Environment News if there was a 100% increase in the Space for News during the study period. The regression Coefficient also reveals that the increase in the news space for environment would be lowest in The Telegraph, and the increase would be lesser than the average elasticity of the increase in the three newspapers.

THE TELEGRAPH: 03-06

Table 5.33

Taking into consideration only The Telegraph published from Kolkata, i.e. during the period of 2003-06, as the table reveals that the regression coefficient is 47 implying there would have been an increase of 47% in the Space for Environmental News if there were an 100% increase in the Space for News only. Comparing with its overall elasticity, the Kolkata edition of The Telegraph had got a better elasticity so far as accommodating environmental news was concerned.
THE TELEGRAPH: 07

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOG(SFN)</td>
<td>0.452407</td>
<td>0.030954</td>
<td>14.61557</td>
<td>0.0000</td>
</tr>
<tr>
<td>R-squared</td>
<td>-0.003785</td>
<td>Mean dependent var</td>
<td>3.874634</td>
<td></td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>-0.003785</td>
<td>S.D. dependent var</td>
<td>0.648114</td>
<td></td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>0.649339</td>
<td>Akaike info criterion</td>
<td>2.125288</td>
<td></td>
</tr>
<tr>
<td>Sum squared resid</td>
<td>2.108206</td>
<td>Schwarz criterion</td>
<td>2.090581</td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-5.375864</td>
<td>Durbin-Watson stat</td>
<td>0.010927</td>
<td></td>
</tr>
</tbody>
</table>

Table: 5.34

The Telegraph, in its Guwahati edition has been found out to be much less elastic as its regression coefficient was 45, less than its overall elasticity during the study period which included both Kolkata and Guwahati edition as well as less than the regression coefficient of Kolkata edition implying that there would have been an increase of 45% in the Environmental News Space of what it had during the study period compared to its overall trend of 46% and the 47% elasticity of its Kolkata edition.

THE TIMES OF INDIA: 2003-07

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOG(SFN)</td>
<td>0.520142</td>
<td>0.010162</td>
<td>51.18332</td>
<td>0.0000</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.103737</td>
<td>Mean dependent var</td>
<td>4.331012</td>
<td></td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.103737</td>
<td>S.D. dependent var</td>
<td>0.675645</td>
<td></td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>0.639641</td>
<td>Akaike info criterion</td>
<td>1.961569</td>
<td></td>
</tr>
<tr>
<td>Sum squared resid</td>
<td>22.91188</td>
<td>Schwarz criterion</td>
<td>1.997412</td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-54.90472</td>
<td>Durbin-Watson stat</td>
<td>1.298152</td>
<td></td>
</tr>
</tbody>
</table>

Table: 5.35

The regression coefficient of The Times of India shows that the increase in the Space for Environmental News would have been nearly 52% if there was an increase of 100% in the Space for News during the study period. The table clearly indicates that The Times of India is poised for a better coverage of environment news compared to other two newspapers under consideration. The newspaper’s rate of increase is better than average elasticity of increase in the other two newspapers.

= 140 =
The Kolkata edition of The Times of India was found to have an elasticity higher than their all round elasticity of 52% which comprises Kolkata, Mumbai, and Guwahati edition. Kolkata edition had a coefficient of 53 which implies that it would have an increase of 53% in the News Space for Environment if there were an 100% increase in the Space for News during the study period. The result is valid at 0% level implying it holds true for all the newspapers published by The Times of India from Kolkata during the study period.

A regression analysis of Mumbai edition of The Times of India reveals that it had in fact a slightly better rate of elasticity than its overall elasticity as well as its Kolkata edition. The regression coefficient for the sample newspapers of Mumbai edition is 53 and above implying that The Times of India Mumbai edition would have registered a growth of 53% during the study period if its Total Space for News could have been made to increase by 100%.
THE TIMES OF INDIA: 07

The Guwahati edition of The Times of India had a far less elasticity than their average elasticity. The news samples of 2007 shows that regression coefficient statistics was 47 implying an increase of 47% in Space for Environmental News if the Guwahati edition of The Times of India registered an 100% growth in its Total Space for News.

THE INDIAN EXPRESS: 2003-07

The results of regression analysis of the news items published during the study period in The Indian Express shows that there would have been an increase of 50% in the present level of space occupied by Environmental News if the Space for News increased by 100%. To put it more clearly, if the newspaper decided to increase its news space for accommodating more news, that news space would accommodate 50% more news space than the news space it gave to environment news during the study period.
THE TIMES OF INDIA

Graph: 5.1

The graph 5.1 shows the trend of coverage of Environmental Stories (ES), Environmental Photographs (EP) and EN stands for the addition of both Environmental News and Environmental Photographs. The graph shows how the coverage pattern reached its climax in 2004, the year of general election in the country, in its Kolkata edition, the early days of the newspaper in the city. The trend took a nosedive in the same edition in 2005. The Mumbai edition of the newspaper showed no special upward turn in 2006 while in 2007, the Guwahati edition of the newspaper showed a slight upward trend, or rather the correction of the downward trend.

THE INDIAN EXPRESS

Graph: 5.2

The graph 5.2 shows the trend of space given to the coverage of Environmental stories (ES), Environmental Photographs (EP) and EN, which is the sum total ES and EP. The trend graph shows that contrary to The Times of India, The Indian Express registered a reverse trend in
the year 2004. Rather in the year 2005, they reached the zenith of their environmental activism. The graph records a downward trend in succeeding years but even then it never really goes down beyond the coverage recorded in 2004. Rather they have maintained a moderately regular standard every year except for 2004.

THE TELEGRAPH

The graph 5.3 registers the trend of coverage pattern in The Telegraph for the period of 2003-2007. Here also ES stands for Environmental stories, EP for Environmental Photographs, and EN for Environmental Stories and Environmental Photographs taken together. The Telegraph also records its highest coverage in 2004 in its Kolkata edition. It records a sharper downward trend afterwards in its Kolkata edition in comparison with The Times of India Kolkata edition. The important aspect of this trend card is that Guwahati edition of The Telegraph shows a marginal increase in printing environmental photographs in 2007 compared to its Kolkata edition in 2006 while environmental stories covered by The Telegraph in 2007 in its Guwahati edition registers a downward trend compared to 2006 Kolkata edition.
Total Space, Ad-comic-horoscope-puzzles and News-editorial articles

![Graph 5.4]

It has has already been mentioned, the researcher had taken one month data as sample for each year of study for each of the three news papers during 2003 to 2007. An analysis of the total print space in simple cumulative terms in each of the newspaper reveals the following phenomena in three different newspapers:

The Telegraph had maximum amount of print space as well as print space allotted to news-editorial-articles:

The Times of India had spent second highest amount of print space on comicstrip-horoscope-advertisement and letters to the editor after The Telegraph.

The Indian Express had lowest Total Print Space, as well as lowest space spent on advertisement in absolute measure among the three newspapers.
Category-wise and total Print space per day on an average
(in column centimeter)

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>News paper</th>
<th>Average print space</th>
<th>Average ad-comic</th>
<th>Average news-edit-articles</th>
<th>Average environment related</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>IE</td>
<td>7204.6</td>
<td>2875.26</td>
<td>4329.34</td>
<td>36.7</td>
</tr>
<tr>
<td>2</td>
<td>TOI</td>
<td>8404.1</td>
<td>4037.22</td>
<td>4366.83</td>
<td>41.4</td>
</tr>
<tr>
<td>3</td>
<td>TT</td>
<td>9334.9</td>
<td>3865.02</td>
<td>5469.89</td>
<td>22.9</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>8310.1</td>
<td>3581.67</td>
<td>4728.45</td>
<td>33.5</td>
</tr>
</tbody>
</table>

Table: 5.40

The table shows that during the study period. The Telegraph(TT) had on an average highest total print space(see second column) as well as space for news(see fifth column) while it had at the same time lowest amount of space on an average for environment related news items. Next comes The Times of India (TOI) with second highest total print space(see second column) and space for news(see fifth column) but with highest space for environment related news items. The table also reveals that The Indian Express had lowest share of non-news space i.e.advertisement,comic strip,horoscope and letters to the editor;(see fourth column) and it had second highest share of environmental news.

Category-wise print space percentage of average sample newspapers

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>News paper</th>
<th>Percentage of ad-horoscope, comic (CSH)</th>
<th>Percentage of news-editorials &amp; articles(SFN)</th>
<th>Environment news &amp; photo(EN) out of total print space of news-edit-articles (SFN)</th>
<th>Environment news &amp; photo out of total print space of news-paper(TPS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>IE</td>
<td>39.91</td>
<td>60.09</td>
<td>0.848</td>
<td>0.51</td>
</tr>
<tr>
<td>2</td>
<td>TOI</td>
<td>48.04</td>
<td>51.96</td>
<td>0.946</td>
<td>0.49</td>
</tr>
<tr>
<td>3</td>
<td>TT</td>
<td>41.40</td>
<td>58.59</td>
<td>0.418</td>
<td>0.25</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>43.10</td>
<td>56.89</td>
<td>0.708</td>
<td>0.40</td>
</tr>
</tbody>
</table>

Table: 5.41

A category wise discussion reveals that The Indian Express had highest percentage of print space when it comes to applying simple arithmetic of giving coverage to environment in terms of total print space(TPS). They had at the same time lowest sapce for non-news items like ad or comics, horoscope,(CSH) and highest space for news during the period of study. Percentage wise they have more space for environment because as the earlier graph showed that they had lowest print space
among the three newspapers under discussion. The Times of India had highest space for CSH among the three newspapers but they had at the same time given highest space to environmental news in simple arithmetic terms to environmental news vis-a-vis space for news. The Telegraph had given lowest space to environmental content vis-a-vis both SFN and TPS in percentile terms
After the print space wise general discussion, let us take up the relative importance of the environment related news/photos assigned by individual newspapers in terms of their placement, location and other variables like slant, type, orientation, source, stakeholders of the environment related news over the study period on a year to year basis.

The graph shows that in 2003, the Indian Express had placed nearly 77% of total environmental news in the upper half while it was much lower in case of The Times of India and The Telegraph with 45% and 50% respectively.

In 2003, The Times of India had highest percentage of front page space for news on environment with 36.35% while The Indian Express and The Telegraph had placed just above 11% and 10% respectively on the front page.
The graph for slant reveals that in 2003, The Indian Express had highest number of eco-friendly stories in terms of percentage, while The Telegraph and The Times of India had almost the same percentage of coverage for eco-friendly news. The significant issue is, there were no pro-development stories in any of the three newspapers.

The graph of Type reveals The Telegraph of 2003 had more number of Pro-Active stories than other two newspapers while The Indian Express had more critical stories compared to the other two.
The graph reveals that The Times of India had highest number of stories from its own battery of newperspersons while The Indian Express had relied more heavily on agency stories in 2003.

The Indian Express had done more number of hard news stories in 2003 as the graph tells us while The Times of India had more number of articles printed on environment. The Telegraph had almost 60% as features out of the total space and diverse items dedicated to environment compared to almost half of the feature items covered in other two newspapers.
The graph for the Stakeholders outlines the fact that The Telegraph had put more emphasis on stories on environmental balance while stories relating to the well being of human society had got more prominence in The Times of India. The Indian Express put an emphasis on stories concerning animal society.

The Times of India: 2003

The data reveals that The Times of India in 2003 was mostly concerned with stories relating to global warming or climate change and 46.52% of space earmarked for environmental issues was spent on these issues leaving minimal space for a host of other issues ranging from deforestation to...
waste disposal including the poaching of animals which has brought back loss of wilderness at the centre of discussion in recent years in most of the third world countries including India.

**The Indian Express:- 2003**

A close look at The Indian Express of the same time period reveals that it was more concerned with stories relating to animal conservation and the ways to protect them from poachers. The Indian Express also gave significant percentage of space to global warming and climate change stories and their news spectrum was comparatively wider.

**The Telegraph:- 2003**

Conservation of animals or to put it more bluntly poaching was an issue for The Telegraph also as is shown from the above news spectrum based on their coverage of environment in 2003, but the preponderance of news relating to global warming or climate change has forced most of the issues at the backburner and consequently the news spectrum is very narrow.
In terms of placement of news, The Times of India had placed highest amount of stories on the upper half, nearly 70%, while The Indian Express and The Telegraph had nearly 50% of stories in upper half.

The graph, 5.14 reveals The Indian Express had highest space among the three newspapers in percentile terms while neither The Telegraph nor The Times of India had any story printed on the front page in 2004 during the period of study.
Slant wise, all three newspapers gave pro-development stories a miss while the percentage of eco-friendly stories was very high in all three newspapers. The Times of India and The Telegraph did a good many number of neutral stories, i.e. they did not take a stand.

In 2004, during the sampling period The Indian Express came out with a very few number of stories while The Times of India did a good many number of stories and nearly 48% stories were pro-active. The Telegraph, Kolkata edition also did a good number of pro-active stories as well as a number of critical stories, but The Times of India did top the list with highest number of critical stories.
In 2004, as the graph reveals, all the sample news items were sourced from their own battery of reporters by all the three newspapers under consideration.

Story Orientation wise in 2004, The Indian Express had highest percentage of articles and The Telegraph had highest percentage of features during the study period among the three newspapers while The Times of India had a very high rate of both news and features.
In 2004, The Times of India had highest number of news items concerned with environmental balance, as high as 86% while The Indian Express had highest number of news items concerned with human society. So far as The Telegraph was concerned, it maintained a fine balance by dedicating its stories almost in equal percentage to all three stakeholders.

The Times of India: 04

This data table shows Times of India putting an emphasis on deforestation and their pattern of coverage shows that there might have been an attempt to sensitise people on fast vanishing act of
green. They have maintained their trend of putting stress on global warming and loss of wilderness as well. Their agenda is much more inclusive this time and the news spectrum accordingly shows variety.

**Indian Express: - 04**

The data table shows news more or less evenly between water crisis and global warming precisely because it was election year and during the summer, water crisis becomes a potential issue in India.

**The Telegraph: - 04**

The Telegraph’s data in graph 5.20 though covers a lot of issues beyond the issues identified by this research defined as others like environmental laws, but they took care to adequately cover deforestation, global warming, air pollution, natural disasters, conservation of animals etc. The Telegraph shows a rare sensitivity to a host of issues hitherto uncovered by them. The probable reason could be the heat mounted by The Times of India, Kolkata edition as they had launched a *Save the Tree* campaign as could be discerned from the data table of the same in the same year.
In terms of Placement of stories, The Times of India had highest percentage of stories in the upper half of the newspaper while The Indian Express had placed highest percentage of stories in the lower half. This had happened because The Indian Express placed a good many number of stories in the anchor position on the front page.

The graph of Front Page coverage shows that The Indian Express had placed higher number of stories in the front page compared to other two newspapers. The Times of India had no stories printed on the front page during the study period in 2005.
The graph for Slant of environmental stories reveals that all the stories of The Times of India were eco-friendly during the study period. Curiously, the Indian Express had come out with some stories with a pro-development slant. So far as the Telegraph was concerned, it had done both neutral and eco-friendly stories.

The graph for the Type of the environmental stories reveals that in 2005, The Telegraph had given highest percentage of space to pro-active stories while The Times of India, Kolkata edition managed to have highest space for critical stories as well as re-active stories, the stories which merely reported the incident.
The graph outlining the Source of stories in percentage terms reveals that The Times of India sourced every story from its own array of reporters while The Indian Express and The Telegraph had to depend a bit on agency reports but even it was not very high.

The graph for Orientation of news in 2005 reveals that The Telegraph had highest number of news items during the study period while The Times of India had more prominent presence in terms of feature stories. So far as the articles and policy announcements were concerned, only The Indian Express had some presence.
The graph reveals that The Telegraph had highest number of stories on environmental balance while The Times of India did highest number of stories on animal society. The Indian Express did highest number of stories on human society or the stories that directly affect human society.

The comparative weightage on different issues graph reveals that in 2005, animal conservation was the major issue for The Indian Express, while water conservation and global warming competed for second position. But in case of The Indian Express, the overriding concern was animal slaughter and the need for conservation. Not only that also highlighted the displacement of crocodiles because of incessant rain or the rehabilitation of Katrina hit pets in the U.S.A.

In case of The Times of India, they had also laid more stress on animal conservation issues but the difference between The Times of India and The Indian Express was the difference in the number of investigative and exclusive stories. (See Chapter 4). The Times of India was present in five category of news items while The Indian Express had covered nine categories out of twelve as specified by the investigator and their news spectrum was considerably wider. The Times of India managed to have some coverage related to global warming and climate change.

The Telegraph also had put more stress on animal conservation while they had given considerable space to stories on global warming and climate change.
The graph of Placement of news reveals that The Times of India had highest, as high as 75% of environmental stories on the upper half while The Indian Express with 63% of total environmental content was a close second during the study period. The Telegraph also had placed quite high, almost 60% stories on the upper half.

In 2006, The Indian Express had placed quite considerable number of stories on the front page as usual but surprisingly The Telegraph had even higher number of stories in the front page at the same time. The Times of India did not give any story front page treatment in their Mumbai edition during the study period but significantly had placed most of the stories in the upper half for catching public gaze as the previous graph reveals.
In 2006, The Telegraph had dedicated its entire space to eco-friendly news while The Indian
Express had given nearly ninety percent of its space to eco-friendly news. The Times of India, on the
other hand, in its Mumbai edition had contributed above 80% of its space to pro-development news
which is a significant departure from the trend perceived in previous years.

In 2006, the graph of news type also reveals a curious fact regarding The Telegraph. The
newspaper had printed all stories during the sampling period critical by type. In 2006, The Times of
India had done highest number of pro-active stories.
The graph of Source for news for the year 2006 reveals an interesting feature. The Telegraph had all the stories during the study period from their staff reporters, something unmatched during the whole period of study in case of the newspaper. The Times of India had, on the other hand, got a huge number of stories from agencies.

In 2006, The Telegraph had highest number of Feature items published in its Kolkata edition while Mumbai edition of The Times of India had more than 70% of its total environmental content occupied by feature stories. The Indian Express had done highest number of hard news among the three newspapers under discussion as per the graph.
In 2006, as the graph reveals, The Times of India, Mumbai edition had nearly 89% stories with environmental balance as the stakeholder, while The Indian Express though had good many number of stories on environmental balance, had actually almost considerable number of stories on animal poaching and conservation.

The Times of India-06

Mumbai edition of Times of India shows a curious and significant deviation from the rest of the editions under discussion. The newspaper was concerned wholly with global warming.

The Indian Express-06

Indian Express of the same time period though shows an adequate concern for global warming and climate change related issues, they took care to show enough concern for issues like conservation of animals as well and if not adequate, at least a minimal concern for issues like river/sea pollution, harmful exploitation of natural resources, water crisis and other issues.

The Telegraph-06

The Telegraph of the same period reveals a disproportionate quantum of space in favour of global warming. The only other significant issue as outlined by them was conservation of animals among the issues explored by the thesis.
In 2007, the graph of Placement of news reveals that all three newspapers had dedicated nearly equal percentage of upper fold placement to environmental content with The Telegraph on top of the chart with 57% of stories.

The Telegraph in 2007 in its Northeast edition did not find any story important enough to be placed in the front page and that fact actually compelled them to place more number of stories in the upper half compared to other two newspapers. On the other hand, the Northeast edition of The Times of India published nearly 30% stories on the front page. What a contrast considering the fact both the newspapers publish their Northeast edition from Guwahati.
Slantwise, The Times of India had reserved highest percentage of space for eco-friendly stories in 2007 while The Indian Express had reserved almost half of the space of environmental content for neutral stories which implies the stories in which the newspaper just merely reported the fact because of the magnitude of the news item.

In 2007, The Indian Express had contributed nearly 75% of its space for environmental news to pro-active news items while it failed to come up with any critical story. On the other hand, Northeast edition of The Times of India came up with all three categories of news items. At the same time it did nearly 66% pro-active stories which implies they had been quite active in collecting environmental news item keeping in mind the gravity of the issue in the context of Northeast India.
In 2007, The Indian Express had all stories from its own correspondents during the study period, normally a near common practice for even environmental news items for the newspaper. The Telegraph had nearly 30% of its stories from news agencies.

In terms of Orientation of environmental content, The Telegraph had printed highest number of hard news items in 2007 and also printed equally high percentage of feature stories. The Indian Express had printed highest number of feature stories with The Times of India having topped the list with nearly 38% place reserved for policy announcement.
In 2007, The Telegraph had highest amount of space for animals and human society as stakeholders in percentile terms. The Indian Express had highest space for stories with environmental balance as stakeholder.

Graph: 5.44

The Northeast edition of Times of India spent nearly half of its environmental news space on conservation of animals. While safe drinking or water conservation or water crisis and waste disposal are significant issues for its Northeast edition, the rest of the space has been occupied by global warming and depletion of natural resources. This is quite in keeping with overall environmental...
concern of Northeast as expressed in other spheres of public discourse. This data reveals a pattern to an extent how the mutual agenda of the newspaper and its immediate community change their position and forces the newspapers to convert public aspirations into their agenda.

**The Indian Express-07**

The national edition of The Indian Express of the same time period shows almost an equal concern for water crisis, depletion of natural resources and conservation or killing of animals. Air pollution and deforestation related stories are also covered by them but in different proportion.

**The Telegraph-07**

Northeast edition of The Telegraph shows concern for almost same issues as The Times of India had paid attention to although with a varying degree of attentions which could be for host of reasons. The data reveals highest coverage for waste disposal, while another major issue is harmful exploitations of natural resources. River pollution is also a major issue according to them as river water is a significant source of subsistence living for a good many number people of Northeast.