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CHAPTER - V

COMPARISON OF KINFRA AND TECHNOPARK

5.0 Introduction

This chapter gives a brief account of the comparison of KINFRA with TECHNOPARK. The 't' testing of hypothesis is also done here.

Albeit KINFRA and TECHNOPARK are government agencies to promote industrialisation in the State, they are differed in many respects. The following are the main differences between them.

5.1 Formation

KINFRA has been formed as per the Extra Ordinary Gazette published by the Government of Kerala on 27th February 1993.

TECHNOPARK has been formed under the Travancore Cochin Literary, Scientific and Charitable Societies Registration Act, 1955. TECHNOPARK was registered with the Registrar on 28th July 1990.

5.2. Status

KINFRA has been formed as a Corporation

TECHNOPARK has been formed as a Society

5.3. Objective

KINFRA has been formed mainly for the purpose of securing and assisting in the rapid and orderly establishment and organisation of industries in industrial areas and industrial estates in the State and for the purpose of establishing growth centres and infrastructure facilities in connection with the establishment and organisation of such industries.

TECHNOPARK has been registered with the main objective of creating the infrastructure and environment required for setting up high technology Electronics
manufacturing units and research, design, development and training establishments; encouraging local entrepreneurship and attracting Non-Redident Indians and companies to set up electronics manufacturing units and research, design, development and training establishments in Kerala; undertaking a major initiative to assist in setting up of software development units in Kerala etc.

5.4. Location of Registered Office

The Corporate Office of KINFRA has been located at Vellayambalam, Thiruvananthapuram.

The Registered Office of the Society (TECHNOPARK) has been located at Kazhakkuttam, Thiruvananthapuram.

5.5 Formation of Subunits

KINFRA Corporate Office has been entrusted with the task of creating a large number of Industrial Parks known as KINFRA PARKS at various locations of the State. KINFRA has so far created more than a dozen of Parks of varied nature far and wide Kerala of which many of its are functional now. Some such sub-units are registered as subsidiary companies.

As far as TECHNOPARK is concerned, it has mainly concentrated in setting up the Kazhakkuttam campus a fullfledged, self reliant and conclusive campus for meeting the overall requirements of the entrepreneurs who are operating their units in the campus. In addition to this, TECHNOPARK has acquired an additional plot beside the Aakkulam back waters for creating the social infrastructure needed for the well being of the inhabitants of the TECHNOPARK units.

5.6 Thrust Area

The Thrust area of KINFRA and KINFRA PARKS is wide and varied. It ranges from Garments, Bio Technology, Drugs and Pharmaceuticals, Rubber and Rubber Products, Construction Materials, Computer and Computer Peripherals, Chip and Ceramic
Components, Consumer Electronics, Food Processing, Coir and Coir Products etc.

The thrust area of TECHNOPARK is Information Technology - Software & Hardware - and ITES.

5.7. Source of Funds for Investment

KINFRA receives its funds in the form of Grants - State Government and Central Government - and Loan from Government of Kerala, Subventions, Advances, Borrowals; Deposits Reserve and other funds etc.

TECHNOPARK is "to receive grants, gifts, loans, fixed deposits, debentures, subscription, donations or any financial contribution in cash and securities and of any property, either movable or inmovable with in the Country or/and abroad including U.N. and other international agencies. Subject to laws, and to invest and deal with funds and moneys of the socety and to vary, alter or transfer investments from time to time".

5.8. Dissolution

As far as KINFRA is concerned, the Govenment may, if satisfied that the purposes for which the Corporation was established under the Act have been substantially achieved so as to render its continuance unnecessary, by notification in the Gazette, declare that the Corporation shall be dissolved with effect from such date as may be specified in the notification and there upon the Corporation shall stand dissolved and there upon-

a) all properties, funds and dues which are vested in or realisable by the Corporation shall vest in, or be realisable by the Government; and

b) all liabilities which are enforceable against the Corporation shall be enforceable against the Government.

As for as TECHNOPARK is concerned, the Society may be dissolved in accordance with the provisions of the Travancore-Cochin Literary, Scientific and Charitable Societies Registration Act XII of 1955 after obtaining the previous consent of the Government of
Kerala in that behalf.

If, upon the dissolution of the Society, there shall remain, after the satisfaction of all its debts and liabilities, any property whatsoever, the same shall not be paid to or distributed among the members of the Society, but it shall be lawful for the members to determine by the majority of the votes of the members present personally at the time of the dissolution of the Society that such property shall be given to the Government of Kerala to be utilised for the purposes referred to in the Societies Registration Act.

5.9. Initial Investment

In KINFRA the initial year grant from Government of Kerala was Rs. 9,68,41,620/- (1993-94).

In TECHNOPARK the initial year grant from Government of Kerala was Rs. 1,50,00,000/- (1990-91). The cumulative grant as on 31-3-94 was Rs 25,75,00,000/- excluding the Govt. of Kerala loan of Rs. 2,10,00,000/-

5.10. Total Capital Invested.

Since its inception on 26-2-1993 till 31-3-2001, KINFRA has received a total Grant of Rs. 18,35,60,000/- from Government of Kerala and Rs. 8,35,60,000/- from Govt. of India and Loan of Rs. 120,76,50,000/- totalling Rs. 147,47,70,000.00.

As far as TECHNOPARK is concerned, the total Grant came to Rs. 78,70,00,000/- and Loan Rs. 2,10,00,000 exclusive of Interest of Rs 2,42,80,439.00 and Corpus Fund created by the Park Rs. 8,61,09,946.74 totalling Rs. 91,83,90,385.74.

In KINFRA, the proportion of Govt. of Kerala loan is 81.89%. Where as in TECHNOPARK the proportion is only 5.44% inclusive of the accumulative interest on loan.

5.11. Net worth

The Net worth of KINFRA as on 31-3-2001 is Rs. 144,83,17,454/63.
The Net worth of TECHNOLOGICAL PARK as on 31-3-2001 is Rs. 80,63,59,208/56.

5.12 Proportion of Networth to Capital Invested

In KINFRA the proportion of Networth to Capital Invested is 98.21% as on 31-3-2001.

In TECHNOLOGICAL PARK the proportion is 87.80% as on 31-3-2001.

5.13. Cumulative Deficit

In KINFRA the cumulative deficit as on 31-3-2001 is Rs. 2,64,52,545.37.

In TECHNOLOGICAL PARK the cumulative deficit as on 31-3-2001 is 11,20,31,177.18.

5.14. Proportion of Cumulative Deficit to Capital Invested

In KINFRA the proportion of Cumulative Deficit to Capital Invested as on 31-3-2001 is 1.79 (i.e. 100 - Proportion of Networth to Capital Invested)

In TECHNOLOGICAL PARK the proportion of Cumulative Deficit to Capital Invested as on 31-3-2001 is 12.20%.

5.15. Land Acquired

Since its inception KINFRA has acquired land to the extent of 2016.9783 acres till 31-3-2001

Whereas in the case of TECHNOLOGICAL PARK it has acquired only 184.72 acres of land in two plots.

5.16. Level of Satisfaction of Park Authorities

Level of Satisfaction of Park authorities of both KINFRA and TECHNOLOGICAL PARK are at Excellent Position. TECHNOLOGICAL PARK Authorities are more satisfied (Score 91.67%) than KINFRA Authorities (Score - 83.33%).

5.17. Level of Satisfaction of Entrepreneurs

In KINFRA 66% of the Entrepreneurs are satisfied at the excellent level, whereas in TECHNOLOGICAL PARK, 71% of the Entrepreneurs are well satisfied with excellent level of
5.18. Average level of Satisfaction of Entrepreneurs

<table>
<thead>
<tr>
<th>Satisfaction at</th>
<th>Average Score</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Operational Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KINFRA</td>
<td>78.38%</td>
<td>K3</td>
</tr>
<tr>
<td>TECHNOPARK</td>
<td>87.98%</td>
<td>T2</td>
</tr>
<tr>
<td>b) Managerial Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KINFRA</td>
<td>85.83%</td>
<td>K1</td>
</tr>
<tr>
<td>TECHNOPARK</td>
<td>89.11%</td>
<td>T1</td>
</tr>
<tr>
<td>c) Financial level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KINFRA</td>
<td>79.76%</td>
<td>K2</td>
</tr>
<tr>
<td>TECHNOPARK</td>
<td>81.69%</td>
<td>T3</td>
</tr>
</tbody>
</table>

Where ‘K’ stands for KINFRA and ‘T’ stands for TECHNOPARK

Average level of satisfaction at the Managerial level is the highest in both the enterprises. Operational Level Satisfaction stands Second in TECHNOPARK where as Financial Level Satisfaction stands Second in KINFRA.

5.19. Educational Institution

In TECHNOPARK campus, the training institute of M/s Tata Consultancy Services and IIITM-K are functioning.

No such Institution has been functioning in KINFRA.

5.20. ISO Certification

TECHNOPARK has received ISO 9002 Certification on Sept. 21, 2000. ISO 9002 model for quality assurance covers the areas of production and installation.

KINFRA has not applied for ISO Certification.
5.21. RANK CORRELATION-KINFRA & TECHNOPARK

I. Correlation between Operational Level Satisfaction of Entrepreneurs in KINFRA and TECHNOPARK:

Based on the following table, rank correlation coefficient as regards the operational level satisfaction of entrepreneurs in both KINFRA and TECHNOPARK is ascertained.

<table>
<thead>
<tr>
<th>Variables</th>
<th>KINFRA (X)</th>
<th>TECHNOPARK (Y)</th>
<th>Rank X</th>
<th>Rank Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>91.67</td>
<td>90.32</td>
<td>2.5</td>
<td>3</td>
</tr>
<tr>
<td>ii</td>
<td>75.00</td>
<td>87.10</td>
<td>6.5</td>
<td>6.5</td>
</tr>
<tr>
<td>iii</td>
<td>66.67</td>
<td>86.29</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>iv</td>
<td>58.33</td>
<td>89.52</td>
<td>9.5</td>
<td>5</td>
</tr>
<tr>
<td>v</td>
<td>58.33</td>
<td>74.19</td>
<td>9.5</td>
<td>10</td>
</tr>
<tr>
<td>vi</td>
<td>91.67</td>
<td>91.13</td>
<td>2.5</td>
<td>1</td>
</tr>
<tr>
<td>vii</td>
<td>91.67</td>
<td>90.32</td>
<td>2.5</td>
<td>3</td>
</tr>
<tr>
<td>viii</td>
<td>91.67</td>
<td>90.32</td>
<td>2.5</td>
<td>3</td>
</tr>
<tr>
<td>ix</td>
<td>83.33</td>
<td>87.10</td>
<td>5</td>
<td>6.5</td>
</tr>
<tr>
<td>x</td>
<td>75.00</td>
<td>87.87</td>
<td>6.5</td>
<td>9</td>
</tr>
</tbody>
</table>

$r_s = 0.75$ (Refer Appendix 5.1)

From the above calculation, it is ascertained that rank correlation coefficient (Spearman's correlation coefficient) in respect of operational level satisfaction of entrepreneurs in KINFRA and TECHNOPARK is having high positive correlation value i.e. 0.75.

Hence the hypothesis that "the operational level satisfaction among the entrepreneurs in KINFRA and TECHNOPARK has no significant difference", is accepted.

II. Correlation between Managerial Level Satisfaction of Entrepreneurs in KINFRA and TECHNOPARK.

Based on the following table, rank correlation coefficient as regards the managerial level satisfaction of entrepreneurs in both KINFRA and TECHNOPARK is ascertained,
From the above calculation it is ascertained that the Spearman's Correlation Coefficient in respect of managerial level satisfaction of entrepreneurs in both KINFRA and TECHNOPARK is having a high positive value i.e. 0.68.

Hence the hypothesis that "the managerial level satisfaction among the entrepreneurs in KINFRA and TECHNOPARK has no significant difference", is accepted.

III. Correlation between Financial Level Satisfaction of Entrepreneurs in KINFRA and TECHNOPARK.

Based on the following table, rank correlation coefficient as regards the financial level satisfaction of entrepreneurs in both KINFRA and TECHNOPARK is ascertained.

<table>
<thead>
<tr>
<th>Variables</th>
<th>KINFRA (X)</th>
<th>TECHNOPARK (Y)</th>
<th>Rank X</th>
<th>Rank Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>83.33</td>
<td>92.74</td>
<td>7.5</td>
<td>3.5</td>
</tr>
<tr>
<td>ii</td>
<td>91.67</td>
<td>94.35</td>
<td>3.5</td>
<td>2</td>
</tr>
<tr>
<td>iii</td>
<td>83.33</td>
<td>88.71</td>
<td>7.5</td>
<td>6</td>
</tr>
<tr>
<td>iv</td>
<td>88.33</td>
<td>84.68</td>
<td>7.5</td>
<td>8</td>
</tr>
<tr>
<td>v</td>
<td>58.33</td>
<td>79.84</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>vi</td>
<td>83.33</td>
<td>86.61</td>
<td>7.5</td>
<td>10</td>
</tr>
<tr>
<td>vii</td>
<td>91.67</td>
<td>92.74</td>
<td>3.5</td>
<td>3.5</td>
</tr>
<tr>
<td>viii</td>
<td>91.67</td>
<td>85.48</td>
<td>3.5</td>
<td>7</td>
</tr>
<tr>
<td>ix</td>
<td>100.00</td>
<td>99.19</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>x</td>
<td>91.67</td>
<td>91.94</td>
<td>3.5</td>
<td>5</td>
</tr>
</tbody>
</table>

$r_s = 0.68$ (Refer Appendix 5.2)
\[ r_1 = 0.53 \] (Refer Appendix 5.3)

From the above calculation it is ascertained that rank correlation coefficient between the financial level satisfaction of entrepreneurs in both KINFRA and TECHNOPARK is having high positive correlation value of 0.53.

**Hence the hypothesis that "the financial level satisfaction among the entrepreneurs in KINFRA and TECHNOPARK has no significant difference", is accepted.**

The highest positive correlation is found in operational level satisfaction (0.75); whereas the lowest one (0.53) is found in financial level satisfaction.

By taking into account the correlation between operational level satisfaction, managerial level satisfaction and financial level satisfaction of entrepreneurs in KINFRA and TECHNOPARK, the hypothesis that "the operational, managerial and financial level satisfactions among the entrepreneurs in KINFRA and TECHNOPARK have no significant difference", is accepted.

### 5.22 Testing of Hypothesis - 4

Take the 4th hypothesis that there is no considerable difference in respect of the operational, managerial and financial performance of KINFRA and TECHNOPARK.

Based on Tables 3.78, 3.79, 3.80, 4.42, 4.43 and 4.44 the following ‘t’ tests have been applied for the operational, managerial, financial and composite level of satisfaction of the officials of KINFRA and TECHNOPARK

1. **‘t’ Test of Operational Performance - KINFRA and TECHNOPARK**

   \[ t = 2.1327 \text{ and } t_{0.05} = 2.776 \]

   As the calculated value is less than that of the table value, the hypothesis holds true.

2. **‘t’ Test of Managerial Performance - KINFRA and TECHNOPARK**

   \[ t = 1.0744 \text{ and } t_{0.05} = 2.776 \]
As the calculated value is less than that of the table value, the hypothesis holds true.

3. 't' Test of Financial Performance - KINFRA and TECHNOPARK

\[ t = 0.7883 \text{ and } t_{0.01} = 2.776 \]

As the calculated value is less than that of the table value, the hypothesis holds true.

3. 't' Test of Composite Performance - KINFRA and TECHNOPARK

\[ t = 2.4150 \text{ and } t_{0.01} = 2.776 \]

As the calculated value is less than that of the table value, the hypothesis holds true.

5.23 Conclusion

Though KINFRA and TECHNOPARK differ in many respects, there is positive correlation between the levels of satisfaction of entrepreneurs - operational, managerial and financial - in both the organisations (Appendices 5.1, 5.2 and 5.3). Similarly, the Student ‘t’ test is applied for testing whether there is any significant difference in respect of the operational, managerial and financial performance of KINFRA and TECHNOPARK, through the Appendices 5.4, 5.5, 5.6 and 5.7 signifies that there is no significant difference. This proves the better prospects of KINFRA and TECHNOPARK in the industrial promotion scenario of Kerala.