

## CHAPTER 6

### MAJOR FINDINGS AND RECOMMENDATIONS

---

#### 6.1 Major Findings:

The major findings of the study are discussed as follow:

- On the basis of Financial Indicators used in the study, out of the 20 depots Bhiwani depot performed best, the CAGR of total receipts have shown highest growth rate and the total expenditure was lowest for this depot, in contrary to Ambala depot whose performance was worst.
- Faridabad and Chandigarh depots are more capable for providing services then others, Chandigarh have the highest growth rate of TS corresponding to Faridabad depot which has highest growth rate in terms of FS.
- The growth rate of accident was -3.28 in Haryana, which indicates that due to development of roads, trained staff, newly buses on road and proper maintenance of old buses the number of accident has been reduced.
- In Haryana the consumption of fuel has been growing only by 0.12% rate. This is also a very good sign for the performance. No significant fluctuations in consumption of fuel have been spotted among Haryana Roadways buses.
- For all depots the compound annual growth rate of TS obtained was -0.40 which implies that the employment opportunity given by Haryana Roadways has been declined in these years in 2001, there were 19134 employer employed and in 2016 only16698 workers employed.

- This study found that the most efficient DMU is D3 (Chandigarh). Chandigarh have the maximum degree of efficiency.
- In 2001, the overall mean TE of DMUs is 77%, indicates that on an average 23% of the technical potential of DMUs is not in use.
- For year 2016 the Overall Mean TE of DMUs is 90%, 10% scope of reduction for producing the same level of output.
- The projected values for inputs shows that all inputs have considerable scope to reduce.

## **6.2 Conclusion:**

The present study was an attempt to trace the performance and evaluates the efficiency of Haryana Roadways from 2001 to 2016 in Haryana at Depot Level. Further, the study has measured the dynamic changes in order to know the dynamic perspective of Haryana Roadways. As already discussed in detail about two major objectives of this study and on the basis of major findings of the study which were discussed earlier in chapter 4 and chapter 5 the main conclusion of the study are -

In Haryana, the public mode of transport is Haryana Roadways, which play a significant role for transport needs. Haryana Roadways has made a remarkable development in its growth in recent years and achieved a well growing transport in India. The results of the study revealed that the growth rate of various performance indicators captures positive growth rate. In term of safety, Haryana Roadways performed well during the study period. The efficiency scores for all depots also improving. Earlier the efficiency score of OTE, PTE and SE explained separately. Overall Haryana Roadways became more efficient then earlier.

## **6.3 Policy Implications:**

- Reduce aggregate expenditures by adopting the best practice of DMUs.
- Haryana Government should create new employment opportunity in public transport sector. This study revealed that over the sixteen years Total staff has been declined in all depots except Gurugram, Rohtak, Bhiwani, Faridabad and Delhi. For development of state, it is very important to develop the public transport sector, because most of people depend on public road transport for fulfill their needs.
- Among 20 depots of Haryana Roadways, Chandigarh is one depot which is fully technical and scale efficient over sixteen years, this depot should be the benchmark decision making unit for rest of depots at the time of policy making to become the efficient units.
- At the time of allocation of Financial Resources it should be noticed Ambala depot performed worse in term of financial indicators there is need to check whether the financial resources of that depot used properly or not.
- This study would help to ensure good governance in resources management and to control expenditure budget.
- Increase in utilization of fleet and maintenance of fleet. New buses should be put on road whenever it is required, new buses are much efficient than old buses that is why old buses are replaced with new.
- Some motivational policies should develop in transport sector, like systematic adjustment of periodical work, on the basic of performance rewards system introduced.
- For capacity building of workers new programs and training should be provided by government for better performance.

#### **6.4 Limitations and further scope of the study**

Present study has some limitations-

- The indicators taken in the study are selected on the basis of availability data. However the selected variables represent the phenomenon appropriately as a number of other studies have adopted almost similar variables for the purpose.
- Here input version of CCR and BCC model of DEA was used and thereby output was constant for the efficiency analysis. The study could have used output oriented CCR and BCC model of DEA to measure the technical efficiency from the side of output.
- The efficiency of Haryana Roadways was calculated using physical parameter and could have used financial variables to assess the financial efficiency.