CHAPTER - 4

RESEARCH DESIGN

- THE SURVEY
- THE CASE STUDIES
- METHODOLOGY
- PATTERN OF ANALYSIS
- KEY VARIABLES
- STATISTICAL TOOLS
- HYPOTHESIS VERIFICATION
- PERIOD OF STUDY
- UTILITY
- LIMITATIONS
- DISPOSITION
RESEARCH DESIGN.

4.1 THE universe of service sector units is very wide ranging from one man outfit like washerman, barbershops and a corner tea joint to large spread of banks, insurance companies, to railways and other modes of transportation to each village panchayat to municipality to various organs of government itself. Therefore for a specific use we limit the sample to most representative service sector units, affecting the life of large number of people. The units selected are representative of Governmental functioning as well as that of commercial activities in service sector to project a fair and realistic base of socio-economic activities.

4.2 The Survey has been conducted across the wide cross-section of service sector units. The executives from the following organisations have been included.

- Public Sector - 10 Branches of 4 Banks.
- Provident Fund Organisation.
- Employees' State Insurance Corporation.
- Telecommunication Circles (Three).
- C.P.W.D.
- State Trading Corporation.
- Road Transport Corporations Four.
- Government Hospitals (Three).

The responses have been collected directly through a structured instrument. The survey has predominantly been restricted to in and around Delhi so as to harmonise.
regional and cultural biases, if any. Care has been taken no to promote any group discussions or to provide any conceptual clarifications so as to eliminate the bias of instantly acquired knowledge.

The sample size of this survey is spread over 450 respondents form 25 selected organisations or their branches. To avoid a sectoral bias the sample size was limited to 50 respondents form Banks and telecommunications and 10 to 20 from other organisations.

THE CASE STUDIES.

4.3 To capture a fairly broad spectrum of service sector employees a fair cross section of employees has been selected from among the two social security organisations i.e. Employees’ Provident Fund Organisation (EPFO) and Employees’ State Insurance Corporation (Esic). These are two organisations where productivity linked reward scheme was introduced more than five years ago and has since been updated at least twice to take care of changes in the work components to suit the dynamic nature of service provided by these organisation.

The selection of enterprises has been done in such a way that it provides an all India basis for study and is truly reflective of the complexities of the service client relationship as applicable to banking, insurance etc. and also reflecting a nureaucratic set up on the lines of Government Departments.
4.4 EPFO has a network of 47 offices spread over the various parts of the country and ESIC has also branches and offices all over the country. Both the organisations are multifunctional and multi-service, with close Govt. control. The customer service characteristics of these two organisations will throw light on relative impact of PLRS on Productivity at individual level and also at organisational level.

4.5 The qualitative study has been carried out on a smaller sample of 50-60 employees across different levels of both the organisation primarily to interpret the productivity improvement as published in Annual reports and other publications and quantitative study through administration of the instrument on a sample of 460 to 360 respondents in each organisation well spread over the country. With a view to provide an all India coverage to this study, the following offices mentioned in Exhibit.4 have been covered:

4.6 A comparision of qualitative and quantitative study has also been made for insightful investigation and conclusions. The productivity perceptions survey to verify the applicability of results of the above survey was planned to cover 250 respondents from different organisations, across the country. The instruments were got filled by the direct contact after providing the requisite explanations to the respondents.
### EXHIBIT: 4 - OFFICES OF THE EPFO & ESIC COVERED BY THE STUDY

<table>
<thead>
<tr>
<th>ORGANISATION</th>
<th>RESPONDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. EPFO</td>
<td></td>
</tr>
<tr>
<td>New Delhi</td>
<td>50</td>
</tr>
<tr>
<td>Kanpur</td>
<td>50</td>
</tr>
<tr>
<td>Faridabad</td>
<td>60</td>
</tr>
<tr>
<td>Chandigarh</td>
<td>60</td>
</tr>
<tr>
<td>Bhubaneswar</td>
<td>60</td>
</tr>
<tr>
<td>Calcutta</td>
<td>60</td>
</tr>
<tr>
<td>Bombay</td>
<td>60</td>
</tr>
<tr>
<td>Hyderabad</td>
<td>60</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>460</strong></td>
</tr>
<tr>
<td>2. ESIC</td>
<td></td>
</tr>
<tr>
<td>New Delhi</td>
<td>60</td>
</tr>
<tr>
<td>Chandigarh</td>
<td>50</td>
</tr>
<tr>
<td>Kanpur</td>
<td>50</td>
</tr>
<tr>
<td>Calcutta</td>
<td>50</td>
</tr>
<tr>
<td>Bhubaneswar</td>
<td>50</td>
</tr>
<tr>
<td>Bombay</td>
<td>50</td>
</tr>
<tr>
<td>Hyderabad</td>
<td>50</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>360</strong></td>
</tr>
</tbody>
</table>
METHODOLOGY

4.7 The mix of methodologies have been used - qualitative and quantitative. The study has been done both qualitatively and quantitatively to assess the impact of PLRS with respect to the chosen dimensions. The qualitative study has been in the form of case studies in selected organisations, and the quantitative study has been done with the help of an instrument specifically developed for the purpose of the study. The output related dimensions and organisational related dimensions have been studied qualitatively through the case study method and the Individual Related Dimensions have also been studied quantitatively with the help of an instrument.

4.8 The existing productivity linked Reward schemes in operation in both the organisations have been studied in detail. Short description of the schemes are appended as appropriate to this study report. Accordingly, the productivity parameters have been identified and their trends studied through annual reports and other published reports. Detailed discussions have been held with senior management representative of both the organisation.

THE INSTRUMENTS

4.9 A structured questionnaire was developed to ascertain the knowledge of the respondent, the status of productivity measurement and planning in his organisation and his perceptions about the need and scope of productivity.
improvement. The questionnaire was finalised after a pilot survey on 20 respondents to adjust the coverage and depth of questions and the spectrum and sequence of structured response. A copy of questionnaire is enclosed as Annexure V. To facilitate analysis and comparison, open-ended questions were avoided. Every question was provided with multiple responses. Respondents were asked to either select the response nearest to their perception or mark their agreement with given responses. In some questions, respondents were asked to rank the given alternatives to effect their choice.

4.10 A separate instrument based on the practical situation and theoretical assumptions was developed and specifically used for the unit case study surveys. The instrument is placed as Annexure VI.

PATTERN OF ANALYSIS UNDERTAKEN, STATISTICAL TOOLS EMPLOYED AND THE VARIABLES INVOLVED:

Key variables.

4.11 In congruence with the objective of the study, there are three sets of dependent variables which have been in the center of focus, namely, (a) the impact on individual behaviour related factors; (b) the impact on individual behaviour related factors; and (c) the impact on systems related parameters. These dependent variables have been mainly analysed primarily in relation to two categories of
independent variables for EPFO and ESIC separately, namely;
(i) Pendency of work or total work load per employee and
(ii) Customer satisfaction, i.e. grievance handling, customer complaints, and time and speed of service. In the
context of the method of analysis, the consideration of such
variables other than PLRS and organisational productivity
like HRD practices and system study if any, done by ESIC and
EPFO.

Scoring Pattern & Statistical Tools.

4.12 Since the questions asked to respondents are of agree-
do not agree type, the numerical number of response itself
gives the scale value of "1" to each respondent. Also in an
attempt to present our finding straight-forward we have
refrained ourselves from the use of sophisticated
statistical tools for interpreting the tabulated data.
Statistics such as summation of observed scores, percentages
and ratios have been used for the analysis planned, and to
arrive at conclusive and generalised verdicts in the study.

The Actual Impact and the Hypothesis Verification.
4.13 Since the total relevance of the study is based on the
permise that PLRS improved the total factor productivity of
ESIC and EPFO and that this improvement and productivity
linked wages (rewards) have had significant impact on the
individual, organisational and systems oriented parameters
in the organisation, it was essential to analysis the PLRS
adopted by ESIC and EPFO and the qualitative growth in defined factors of productivity.

PERIOD OF STUDY.

4.14 The study relates to the perceptual information gathered during 1994 from the employees in the service sectors selected for this study. The analysis of productivity linked reward schemes for various organisations has been done with reference to the year 1994-95. Where as the study covered the time frame of preceding period of 3 to 5 years for impact analysis depending upon the existence of productivity limited reward schemes (PLRS) for the units selected for case-studies.

UTILITY.

4.15 The study output will be useful for scholars and executives in the field of Organisational Development and Productivity Management in the field of service sectors in India. The study will provide a specific definition of 'Productivity' as applicable to services sector and generalise the factors creating awareness of productivity in service sector. The study will also put forward the logical frame works of productivity measurement in service sector and its linking with reward systems. The study will provide the proof for selected hypothesis and thereby prove the theoretical model of Productivity impact analysis in a service sector organisation which would be widely used to
assess the efficacy of the existing and future productivity linked reward schemes in the service sector organisations, in reference to its impact on organisational Development.

LIMITATIONS:

4.16 Since the activity profile of service sector are unique to each organisations and even each department of same organisation, this outcome of the study at best be treated as indicative and generic in nature. Therefore specific unit related models will need to be developed for individual units in reference by each researcher.

THE DISPOSITION:

4.17 In its complexion, the Study is primarily empirical and exploratory. It is empirical in so far as it rests on the experiences of the selected employee respondents as collected in the form of perceptual responses regarding the practices in the organisation. And, it is exploratory in character as long as it is first attempt of its kind in the direction of assessing the impact of productivity linked reward system on the total productivity parameters of the select service organisation.