CHAPTER VI

CONCLUSION
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6.1. Introduction

The purpose of this study is to understand the performance appraisal methods adopted in various R&D organisations and to compare them with that followed in CSIR. The performance appraisal of scientists is a bit tricky, inasmuch as their performance appraisal cannot be measured in precise terms as in the case of the manufacturing sector where quantification of output is possible. Studies conducted abroad have suggested an approach of MBO type of performance appraisal for scientists. A study of the literature (Chapter II) reveals that the concept of 360 degree appraisal is emerging wherein all the stakeholders will have a say in assessing the performance of R&D scientists. This includes the scientists themselves, the R&D manager, the peers, the subordinates and the customers. The targets are set beforehand and the goals are measured periodically.

6.2. An Overview of Appraisal System

The researcher attempted to study the performance appraisals of scientists in the public sector. For the purpose of this study, the performance appraisal systems of ARCI, DAE, DOD, DRDO, ICAR, ICMR, IIRS, IOC, ONGC and SAIL were analyzed (Chapter III).
All the organisations followed the standard pattern, Part I, containing personal
details and global essay form of writing, is used to describe the nature of the task
performed by the officials. DOD, IIRS, and DAE follow almost similar formats in which
Part I contains personal details and Part II describes various traits of performance on a
graphic rating scale. SAIL and IOC have a concept of mid-term review and feedback is
given to the personnel half-yearly. All the organisations communicate the final grading to
the employees. ARCI follows a method of forced distribution, consisting of top 25%,
middle 50% and bottom 25%. ICAR follows a quantification system of marks consisting
of various parameters in the form of a score card. ONGC has an exhaustive system of
appraisal, which includes the history of the employee, number of postings already made,
family difficulties, if any, and future developmental needs. The scientific organisations
follow a merit system of promotion which is not based on seniority but on the basis of
proven worth by way of achievements, awards, peer recognitions, publications and
overall consistency of good performance. Personal characteristics and attitudes and
behavioral aspects are also assessed. The assessment follows a general pattern like
reporting by an officer and reviewing by another officer. Only in a few organizations,
group assessments are made. At present, no organisation consider for this study follows
the 360 degree appraisal system i.e., appraisal by superiors, sub-ordinates, peers and
customers and stakeholders. The concept of 360 degree appraisal is new to government
organisations. While devising a new performance appraisal system for CSIR, factors like
mid-term review, and annual interview before assessment, counseling and feedback,
potential appraisal, and 360 degree appraisal by subordinates, peers and immediate
supervisor shall also be taken into consideration. A comprehensive performance appraisal system is suggested for CSIR.

6.3. The Annual Performance Appraisal Report

The present state of affairs of CSIR system is discussed in Chapter IV. A good performance appraisal system is needed as the promotion whether it is merit-based or normal, is linked to the grading of annual performance reports. The promotion is also based on quantitative marks which vary for different groups and grades. The scientific and technical staff of CSIR is divided into four groups: Groups I and II (supporting staff); Group III (technical) and Group IV (R&D/Scientific). Each group is further divided into different grades. The threshold marks for further promotion progressively increase with grades/Groups. The annual performance appraisal report (APAR) has 50% weightage for Groups I to III and V (A). The problems of procedures for communicating remarks (which has a legal bearing) to the employees and related aspects are also discussed in Chapter IV. Normalisation by a group of scientists who shall ‘rationalise’ the bias element in the subjective aspects of performance appraisal is also discussed and suggestions are made.

6.4. The Annual Review of Performance and Analysis of Related Issues (ARP)

The new annual review of performance (ARP), introduced from January, 2001 has created a sense of apprehension in the minds of scientists of CSIR. This is discussed in detail in Chapter V. For the purpose of the study, a representative sample of five CSIR laboratories/institutes (NIO, CLRI, CECRI, ITRC and IIP) was taken. Nearly 100
scientists of NIO participated in the survey. The respondents from the other laboratories were less than 25 in number.

The fifteen parameters that were studied with reference to ARP are (1) objectivity of the new ARP; (2) wide coverage of basic information; (3) coverage of self-assessment; (4) exhaustiveness of self-assessment; (5) coverage of present assessment by HOD/PL; (6) evaluation of the new ARP; (7) exhaustiveness of capabilities potential Index; (8) Coverage of Values and Quality of Index; (9) Coverage of PI, CPI and qualities index; (10) preferability of weightage of PI-0.6, CPI 0.2, and VQI 0.2; (11) confidentiality of Normalisation; (12) necessity of normalisation by a committee; (13) desirability of sharing strengths and weaknesses; (14) communication of the final score; and (15) appropriateness of further growth plan under ARP. The scientists were grouped in four age groups: (a) scientists below 35 years; (b) scientists aged between 36 and 45 years; (c) scientists aged between 46 and 55 years; and (d) scientists aged above 55 years. Their opinions on the 15 parameters of ARP were classified as: agreed; disagreed and undecided. The results were analysed by two-way ANOVA with reference to age and opinion. The results for each laboratory/institute are presented in Figures 5.1 through 5.75. The statistical analysis is presented in Tables 5.1 through 5.75. The consolidated findings are presented in Table 5.76. The questionnaire administered is annexed as Appendix.
6.5. A New Format

Keeping all these findings in mind and reflecting on the opinion of scientist on the performance appraisal system, the researcher has developed a new format of performance appraisal system suitable for implementation in CSIR. The new format has been devised keeping in mind the best practices adopted in other organisations in the public sector. Goals are assigned before the beginning of the year. Informed consent of the staff is obtained. Mid-term review is suggested for course correction. Annual performance interview is introduced, which hitherto absent in the CSIR system. A form of critical incidents is suggested for the reporting officer. Model forms for performance appraisal interview are also suggested. Potential appraisal is made for future growth and development. A suggestion has also been made for 360 degree rating, i.e., peer appraisal and subordinate appraisal prescribed for officers/scientists of gazetted scale and above so that supervisory staff can make efforts to overcome their shortcomings.

Since the assessment promotion of scientific staff is essentially based on the annual performance appraisal report, a good performance appraisal system can pave way for objective evaluation. Weights are suggested for different groups and grades for meeting the functional needs and requirements expected of the grades/groups. A judicious mixture of weights has been employed to arrive at the cumulative marks out of a maximum of 100. A suitable conversion range is also prescribed for giving the final grading in a seven-point scale. An element of objectivity has been brought in the annual performance appraisal system, which was hitherto marked by rhetoric use of the grades.
like 'good', ‘satisfactory’, ‘very good’, etc. The performance appraisal system suggested is presented in Annexure-I.

To give a mechanism for appeal/review, it is suggested that except Scientist G, (whose appointing authority is DG, CSIR), all scientists in the gazetted scale be given an opportunity of appeal if required to the Director of the laboratory/institute, he being the appointing authority as well as the disciplinary authority up to the Scientist F level. The Director of the national laboratory will give a personal hearing to all the aggrieved employees and give his rating taking all aspects into account. The Director’s decision is final and binding.

6.7. Scope for further work

It is hoped that further research could be done on the promotional policies of CSIR. A study can be made on the impact on implementation of the MANAS and ARP schemes, cost effectiveness, number of merit promotions awarded in each laboratory, burden on exchequer, relative effects on employee morale as a result of promotion, and other related issues.

To conclude, it may be stated that something well begun is half done. A good performance appraisal system is not a panacea for all ills ailing the organisation but it is certainly a good beginning to make. It serves as a link between the employer and the employees and act as a catalyst for organisational effectiveness.
Annexure-I

ID No.

COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH
ANNUAL ASSESSMENT FORM FOR SCIENTIFIC STAFF

REPORT FOR THE YEAR ENDING ____________

Part 1 for office use:

1. Name : Dr/Shri/Smt/Kum

2. Date of birth :

3. Date of entry into Council service :

4. Confirmed as (Post) :

5. Present post/Designation of post :
   Scale of pay :
   Date of appointment :
   Present basic pay (Rs. per month) (As on 1.4. ) :
   Status in the present post :
   (confirmed/temporary/contract/officiating) :

   Period of absence on earned leave, Training etc. during the review year

6. (i) Academic qualification :
   a) Highest degree or diploma :

*Underline any qualification/training/membership/awarded or acquired during the period of the report.
b) Subject or field:

c) Year the degree/diploma was obtained:

(ii) Any specialised training:

(iii) Membership of learned society/ professional institution:

(iv) Awards or honors:

( )

SIGNATURE OF SECTION OFFICER WITH DATE

Part II to be filled by the employee

7. Information given under 1-6 is correct Yes/No

8. Nature of present duties [tick the appropriate item/items]

Experimental work in laboratory/pilot plant

Data/result interpretation
Design and engineering

Planning and co-ordination

Documentation/library

Technology transfer services

Market survey/intelligence

Maintenance and service

Any other not covered above (specify)

9. Work done during the period of review

a) Title of present R&D engagements

(i) Project No.: (ii) Project title:

(a) (a)

(b) (b)
(ii) Role specified for your activity within project group:

(iii) Work other than R&D activity

(b) Actual work done separately under each of the sub-heads mentioned in 9(a) above

*10. Publications, reports etc. during the year under review

11. Process/know-how released to industry and consultation assistance rendered to industry-party during the year under review. Specify your individual contribution in case of team work:

12. If you consider that you have performed a specially meritorious job, mention details under this column:

*List separately under different heading such as a (a) Research paper, (b) Review papers, (c) Techno-economic papers, (d) Patents, (e) Literature notes, (f) Feasibility and Project reports, and (g) Others. List all authors in case of joint work.
13. Self-evaluation of tasks accomplished vis-à-vis approved plan of work/assignment.

SIGNATURE OF ASSESSEE
(With date)

NOTES FOR INFORMATION OF REPORTING OFFICER AND REVIEWING OFFICER

1. The preparation of assessment reports on the staff is an exceedingly important duty. In fairness to the staff reported on as well as in the interest of the smooth and efficient working of the organization, reports should be carefully and critically made.

2. You should not discuss your assessment with anyone except the countersigning officer, and that too if he requires you to do so. In case a candidate is assessed by
two assessors, each should assess independently and must not consult the other in any way.

3. Do not feel obliged to mark under every heading. Please note that some headings may be inapplicable. Do not attempt to guess at any quality that you have not been able to judge first hand; in such cases make no marking at all.

4. Do not hesitate to give low ratings if they are deserved. No one can hope to be equally good in every way and some low ratings may be justified, even for the most brilliant. The assessment should be objective.

5. No reference should be made to previous reports.

6. The assessment form must be completed by an officer who is at least one grade higher than the officer being assessed. The assessor should have first-hand knowledge of the assessee and his/her work.

7. The Reviewing officer should preferably be at least two grades higher than the officer assessed upon and, wherever possible, be a member of the appropriate professional, scientific or technical class.
Part III to be filled in by the Reporting Officer

14. (a) Name and designation of Reporting Officer

(b) The period through which the Officer reported upon has worked under the Reporting Officer during the review period:

(c) Evaluation by the assessor of the work reported under item 9 and the self-assessment report under item 13.

Mid-term review (normally done in the month of October)

A) Goals met :

B) Shortfalls observed :

C) Suggestions made :

Signature of the assessee Signature of the assessor

(Form No.3 can be used by assessee) (Form No.1 and Form No.2 can be used)
15. Evaluation of the performance of the incumbent by the Reporting Officer.

A. Professional Abilities

<table>
<thead>
<tr>
<th>Score rating by the Reporting Officer</th>
<th>Remarks, if any</th>
</tr>
</thead>
</table>

1. Knowledge and comprehension of subject/job
2. Knowledge in allied subjects
3. Comprehension of assignment, technical judgment
4. Skill in experiment/practical work (accuracy, dependability)
5. Methodical ness
6. Output related to assigned tasks
7. Originality
8. Expression – written & oral

Sub-total

Rated Maximum

*The Reporting Officer is requested to grade the official in the range of 1-100.
B. Managerial abilities

*Score rating by Assessor  Peer  Remarks

1. Administrative judgment ability
to analyse facts and formulate
policies and methodologies :

2. Organising capabilities :

3. Leadership-getting the best
out of one’s colleagues :

4. Leadership in relation to people :

5. Outside the team/group :

6. Objective understanding of social,
economic goals of job undertaken;
orientation to the taste :

<table>
<thead>
<tr>
<th>Sub-total</th>
<th>Rated Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Personal Qualities and Behaviour Aspects (to be also filled separately by two subordinates)</td>
<td>Grading by Subordinates</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>1. Punctuality and attendance</td>
<td>:</td>
</tr>
<tr>
<td>2. Initiative and keenness</td>
<td>:</td>
</tr>
<tr>
<td>3. Co-operativeness/ Inter-personal relations</td>
<td>:</td>
</tr>
<tr>
<td>4. Tact and Maturity</td>
<td>:</td>
</tr>
<tr>
<td>5. General personality (honesty, integrity, conduct and bearing)</td>
<td>:</td>
</tr>
</tbody>
</table>

Sub-total : _______________________

Rated Maximum: _______________________

*The Reporting Officer is requested to grade the official in the range of 1-100

**NOTE**: By two peers (for staff in the grades of Group A officers and above)

To be also furnished by two subordinates and submitted separately to the Reviewing Officer.
### SUMMARY

<table>
<thead>
<tr>
<th>Rating</th>
<th>Sub-total</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| A) Professional ability | 40        |       |
| B) Managerial ability  | 30        |       |
| C) Personal qualities  | 30        |       |

Grand Total [________]  

Average rating = G.T. (above)

---

**Grading on the basis of the overall average rating scale**

<table>
<thead>
<tr>
<th>Rating</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>90-100</td>
<td>Outstanding</td>
</tr>
<tr>
<td>80-89</td>
<td>Excellent</td>
</tr>
<tr>
<td>70-79</td>
<td>Very Good</td>
</tr>
<tr>
<td>60-69</td>
<td>Good</td>
</tr>
<tr>
<td>50-59</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>40-49</td>
<td>Fair</td>
</tr>
<tr>
<td>Below 40</td>
<td>Poor</td>
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The grading 'Fair' calls for counseling with the Area Leader. The grade 'Poor' and adverse entries must be communicated to the employees.
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<td>Fair</td>
</tr>
<tr>
<td>Below 40</td>
<td>Poor</td>
</tr>
</tbody>
</table>

The grading ‘Fair’ calls for counseling with the Area Leader. The grade ‘Poor’ and adverse entries must be communicated to the employees.
Weight factor may be changed by Director through orders covering different categories of staff and duties performed. The weights for scientific staff are

<table>
<thead>
<tr>
<th>‘A’. Professional ability</th>
<th>‘B’. Managerial ability</th>
<th>C. Personal qualities</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘A’</td>
<td>‘B’</td>
<td>‘C’</td>
</tr>
</tbody>
</table>

For Group IV Scientific Staff

For Scientists ‘B’ and ‘C’ 50 30 20
For Scientists E-I and above 40 30 30

D. i) Grading according to the above criteria:
   ii) Any special remarks on characteristics not brought out above:
   iii) Any general comment on the assessee’s performance during the year and remarks for his/her future guidance:
   iv) Potential for further developments/training required, if any:

SIGNATURE OF ASSESSOR
DESIGNATION
DATE
PART-IV REPORTING BY REVIEWING OFFICER AFTER INTERVIEWING THE ASSESSEE

16. (a) Do you agree with the evaluation of the Assessor as in Col.14 (c)? If you differ, please comment in detail. Please also take the inputs of Peers and Subordinates and give weighted range

(b) Please give your own rating keeping in view the details of the Assessor’s judgment mentioned in Col.15 and the views of Peers and subordinate on the respective factors.

Signature:

Designation:

Date:
PART-V  NORMALISATION BY THE COMMITTEE (A COMMITTEE OF FIVE HIGH-LEVEL SCIENTISTS DRAWN FROM DIFFERENT AREAS OF THE ORGANISATION)

PART VI

RECOMMENDATIONS FOR FUTURE DEVELOPMENT (AFTER TAKING ALL INPUTS)

SIGNATURE OF THE MEMBERS

PART VII APPEALS, IF ANY

DECISION OF THE DIRECTOR
FORM I

Record of critical incidents: performance and behaviour
(to be maintained by the immediate superior)

Appraisee’s name
& designation: ____________________________  Period: __________

Department: ____________________________

INSTANCES

<table>
<thead>
<tr>
<th>Date</th>
<th>Favourable/Positive</th>
<th>Unfavourable/Negative</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>
FORM 2

Form for preparation of appraiser for appraisal interview

(The appraiser is advised to use this form for preparing himself/herself for the appraisal interview).

Name:_______________________

Designation:___________________

1. What was expected of the appraisee and what have been his/her major accomplishments/contributions/achievements during the year?

2. In which areas has his/her performance fallen short of expectations?

3. Which factors facilitated his performance and which factors hindered or inhibited him/her? Did he/her suffer from any constraints which were either partly, largely or entirely beyond his/her own control?

4. What are his/her real strengths in terms of knowledge, experience, skills and behaviour? What are his/her weaknesses?
5. Are his/her strengths being fully utilized in his/her present job? If not, what can be done about it? What can be done to help him/her to overcome his/her weaknesses, to use his/her strengths and to improve further?

6. Was I myself responsible in any way for his/her failures and shortcomings? Did I give him/her the guidance, support, facilities and resources required for effective performance? If not, what should I do about it in future?

7. In which areas does he/she need training (knowledge, skills and behaviour)? How can such training be provided?

8. What issues should I discuss with him/her? What would be a positive and effective way of discussing these issues with him/her?
FORM 3

Self-appraisal
(Preparation for the appraisal interview)

(This part of self-appraisal may be completed, entirely at the option of the appraisee, by way of preparation for the annual appraisal interview. It should be kept in the appraisee’s own custody. He/she has the option, however, to discuss such matters arising out of his/her exercise as he/she may himself/herself decide upon with his superior for seeking guidance, counsel and help).

1. What are the major areas/assignments in which I am satisfied with my performance?

2. What are the major areas/assignments in which I am not satisfied with my own performance?

3. What are the reasons for unsatisfactory performance in these areas (as noted under 2 above)? Were there any genuine constraints (entirely, largely or partly) beyond my own control? Was I myself responsible in any way? What were the problems? What could I do to overcome these problems? What shall I do to improve my performance in these areas in future?)
4. What are my real strengths? Am I using them fully? How can I use these strengths to be more effective as a manager?

5. What are my weaknesses (in terms of knowledge, skills and behaviour)? In which areas do I need improvement? How can I achieve such improvement?

6. What are my handicaps and constraints in terms of opportunities, resources, facilities, relationships and support received from superior(s)? How can I overcome them?

7. In which areas do I need training (knowledge, skills, behaviour)?

8. What problems should I discuss with my superior so that I can improve my performance further and achieve growth?

9. What kind of guidance/counsel/support/help/delegation/recognition do I expect from my superior so that I can be fully effective and achieve further growth? Are my expectations reasonable? Are they being fulfilled? If not, shall I discuss these issues with him/her? What would be a positive and effective way of discussing these matters with him/her?