

(5.4) Project Budgeting and Cost Accounting

(5.4.1) Guidelines regarding Introduction of Project Budgeting and Project Cost Accounting in CSIR Labs./Instts.

1. Objectives

- i. To inculcate cost consciousness and accountability among the project leaders/scientific community.**
- ii. To enable the optimal utilization of resources at various stages of implementation of projects.**
- iii. To obtain cost data on each project.**
- iv. For facilitating course corrections in the total cost estimates of the projects as well as decisions concerning reallocation of resources.**
- v. To provide information to the management to monitor the flow of financial inputs in relation to physical outputs.**
- vi. To realistically project the future requirements of project in the budgetary process.**
- vii. To serve as an aid to CSIR for better management in planning, monitoring and reviewing of the programmes, projects and activities of the laboratories.**

2. Methodology

The system of project budgeting and cost accounting has to be an integral part of the planning process, resources allocation, monitoring and evaluation within the laboratory organisation. This will require the following steps to be undertaken.

2.1 Organisation of P,M,E. Cell

2.1.1 Role and functions of the PME Cell in the costing context..

Role and functions of the PME Cell would inter-alia be as follows :-

- a. PME Cell shall constitute a focal point for implementation of the process of project budgeting and cost accounting.**
- b.They will maintain project folder for each of the projects containing the initial project proposal, project authorisation, its code number, recommendations of internal Committee, RAC and EC, periodical progress reports both physical as well as financial and completion reports of the projects etc.**
- c.To provide assistance to the project team/project, leader in calculating the cost of inputs - manpower material, capital and other items.**
- d.To assist the management in preparing annual plan, five-year plan, duly correlated With traditional budget and compilation of other relevant information for decision making to different projects/activities and to notify approved allocation to the concerned project leaders /coordinators accordingly.**
- e. To Assist the management in the allocation of resources.**
- f. To coordinate with different Divisions namely Accounts, Stores, Purchase, Administration, Technical Services Division and R&D Divisions for the compilation of project-wise budget, cost accounting review and monitoring.**
- g.To prepare monthly summary reports of cost data of all the projects and its reconciliation with the expenditure shown in the conventional accounts and furnish it to the concerned authorities.**
- h.To attend to such other functions as and when assigned by the Director.**

2.1.2 Constitution of PME Cell

The PME Cell may in general constitute the following experts

- i. One Scientist 'E' or above - preferably from one of the basic disciplines of the laboratory and/or from other disciplines of natural sciences with high expertise in the modem methods of R&D project management.**
- ii. One or two Scientists 'B' or 'C' - from the disciplines of Statistics/Economics/Mathematics/Commerce/Computer with practical**

experience of implementing modern methods of R&D project management in R&D situations.

iii. One or two supporting staff for collection and collation of the data.

NOTE: The Size of the PME Cell shall vary with the size of the laboratory, as below:

	Size of PME Cell
(a) Labs with budget Rs 2 crores or above	Five
(b) Labs with budget Rs 1 - 2 crore	Four
(c) Labs with budget less than 1 crore	Three

Where the strength of the existing PME Cell in a Lab. falls short of the above, necessary manpower may be found by suitably redeployment of staff from within the Laboratory.

2.2 Constitution of an Internal Committee

In order to assist the Director in decision making, a high level, standing Internal Committee may be constituted

2.2.1 Functions of Internal Committee

- a. To allocate resources to different projects within the framework envisaged by RAC/EC of the Laboratory.
- b.To periodically monitor and evaluate the progress on the projects in relation to financial inputs and physical outputs.

2.2.2 Composition of Internal Committee

The Committee may comprise of the following functionaries:-

(a)	Director	Chairman
(b)	Scientists (upto 6) (To be nominated by the Director including at least one existing Scientist who is a member of EC)	Member
(c)	Administrative Officer	Member
(d)	Sr. Finance and Accounts Officer/Finance and Accounts Officer	Member
(e)	Head of P.M.E. Cell	Member Secretary

Director At his discretion may co-opt other project leaders/Area Co-ordinators as members depending upon situations and conditions prevailing in the laboratory.

2.3 Re-structuring of project formulation system

In order to implement the project budgeting and cost accounting system it is imperative that different activities and functions of the laboratory be identified as distinct cost-centres. This would require re- structuring of the project formulation system. Following steps would be required to be undertaken:-

- (a) All functions/programmes of the laboratory would be broken down into projects cost centres

This would broadly fall into following groups: -

R&D projects,

Infrastructural and

other cost centre

b.R&D projects may be classified as below

- i. NICTP
- ii. MAP

- iii. **Projects costing Rs. 5 lakhs and above.**
- iv. **UNDP/Foreign aided projects**
- v. **Collaborative projects**
- vi. **Sponsored/consultancy projects**
- vii. **Other minor projects (grouped into area/discipline /division wise)**
- viii. **Pilot Plants**
- ix. **Extension Centres**

(b) Infrastructural facilities/services -will generally constitute the following cost centres.

This may, however vary from one laboratory to another depending upon their respective functions.

i. Technical

- **Library and documentation services**
- **Computer Services**
- **Workshop**
- **Glass Blowing**
- **Drawing design and engineering services**
- **Boiler House**
- **Instrumentation**
- **Animal House**
- **Photography/printing/Xerox etc.**
- **PME/Technical Information/Industrial Liaison**
- **Others**

ii. Administrative

- General Administration
- Finance & Accounts
- Stores
- Purchase
 - Maintenance
 - Watch & Ward
 - Medical Facilities
 - Analytical & Testing services
- Welfare
 - Cleaning & Sanitation
- Any other

d. Any other activity which is not distinctly identified as Cost Centre as above may be considered under miscellaneous.

e. Each project/infrastructure/cost centre shall have an identifiable code number permanently assigned to it.

NOTE : 1) Each R&D project shall have a definite time frame and clearly defined objectives

2. To determine whether any on-going project is major or minor will depend upon the total cost of the project and not the cost of remaining period for which separate cost accounts are to be maintained.

3. Planning

3.1 There are two essential ingredients of the planning process, namely

- a) Scientific and technical aspects.
- b) Financial aspects.

So far as scientific and technical aspects are concerned, projects shall continue to be formulated in accordance with the policy directions given in RAC, E.C & CSIR within the overall goals and charter of the laboratory. These will be processed for approval through internal committee, Director, RAC and EC of the laboratories.

3.2 Financial aspects of a project would include the following elements: -

i.Direct Cost:

- a.Cost of manpower (% time involved per (Profonna -1) person proposed to be deployed**
- b.Additional manpower required, if any (Proforma-II)**
- c.Cost of Materials - Consumables and non- consumables - (Proforma-III)**
- d.Special capital equipment (Proforma-IV)**
- (e) Works and services specifically needed (proforma -V)**
- e.Others (Misc./Contingencies etc.)**

ii.Indirect Cost:

- a.Estimated cost of other allowances not covered under direct charges.**
- b.General & divisional overheads-expenses covering infrastructural facilities costs, contingencies, maintenance etc.**

3.3 Role of project leaders/project team in the planning process.

a. Framing of project cost estimates

As and when a project is proposed to be undertaken the project leader/team shall take action to frame the project cost estimates based on direct cost & indirect cost as mentioned above. The direct cost shall be calculated in consultation with PME Cell, Finance & Accounts Officer and Stores & Purchase Officer. The indirect cost will be based on general pattern of overhead percentage as determined by PME Cell from time to time.

- b. Once project cost estimates are prepared, these shall be processed for approval by Internal Committee Director/E.C through PME Cell**
- c. After the project & project cost estimates are approved this will be codified by PME Cell and Code number of project notified to the project leader/team for all future references.**

3.4 Framing of Annual Plan

Based on the project cost estimates, the project leader /team will provide information for the preparation of annual plan and budgetary requirements (direct costs only) for the respective financial years. The details of requirements will be given as per the proforma I to V.

Role of PME Cell

Based on the information given by project leaders in the proforma VI to XI, the PME Cell shall work out the following:-

- a. Financial implications for each project for inclusion in the Annual Plan as per the CSIR format.**
- b. The total financial implications shown under projects as well as infrastructural facilities shall be shown separately and correlated with the figures projected under conventional budget.**
- c. In order to facilitate the preparation of Annual Plan PME Cell shall issue a Calender (Proforma XII) requesting all the Heads of Divisions/Project leaders /Heads of infrastructural facilities to furnish the information on due dates. The PME Cell shall issue a set of standardised proforma in order to facilitate the work.**
- d. The particulars of requirements coming under Infrastructural facilities/services shall be collected by PME on the suitable format (Proforma No. XVII).**
- e. PME Cell shall work in close co-ordination with Finance & Accounts Section for framing the Annual Plan/Budget estimates.**

3.6 Role of Finance/Accounts Section

Sr.F&A.OIF&A.0 would provide all the facilities to PME Cell/Project leaders to enable them to frame the total cost estimates, Annual Plan and actual cost compilation of the projects.

3.7 Role of Purchase

- a.The Purchase Officer shall supply to all the project leaders as well as PME Cell, information about the commitments already made (Proforma-XIII) and also about purchases which are in the pipe line, which actually forms the base for projecting the future requirements.**
- b. He will assist the Project Leaders and PNM Cell in assessing the cost of material inputs for the purpose of framing cost estimates & Annual Plan.**

4. Cost Accounting

As already mentioned, PME Cell will act as a focal point for project cost accounting. Total expenditure of the project will be accounted under the following heads : (Profonna-XIV).

- i. Salary - research personnel cost**
- ii. Other allowances**
- iii. Consumables - General Stores**
- iv. Consumables - Project Stores**
- v. Capital equipment**
- vi. Works& Services**
- vii. Service charges like computer charges, Workshop charges etc.**
- viii. Facility utilization charges (Depreciation)**
- ix. Overhead charges**
- x. Any other**

4.1 Direct Cost

- a. Manpower**

The salary cost of the project will be worked out on the basis of the percentage time involvement of the research personnel in respective projects as indicated in Proforma I at the time of preparation of annual plan. These Percentages will hold good for the entire period of one year unless otherwise intimated by project leader/head of division to the PME Cell. Changes occurring in manpower deployment on account of initiation of new projects, abandonment of projects, shifts in priority/thrusts to different projects, additional recruitment or resignation or transfer of personnel, etc. in the course of the year shall be duly considered by PME after getting the information from the Section concerned. Posting of the salary cost will be made with reference to the salary bills paid by the Finance & Accounts Section. The other source could be the establishment audit registers maintained in Finance & Accounts Section. Likewise supplementary bills will also be posted. It may be noted that for the purpose of accounting the gross salary need only be posted and not the net salary.

b. Other Allowances & Honoraria

The Accounting procedure for allowances other than DAIDPIHRA/CCA/Conveyance etc., which are included in the salary, will be as below

i. TA.

If the journey is undertaken in connection with the investigation/discussion/seminar and symposium/or other needs relating to a particular project, the cost will be debited to the concerned project. Other wise, this will be treated as overheads.

ii. O.T.A.

If overtime is done in connection with a particular project, allowance paid may be treated as direct charge to the project otherwise it shall be treated as overheads.

iii. Honoraria

Same as in the case of TA and OTA

- iv. LTC, Medical charges., children education allowances & tuition fee, procurement of medicines & physically handicapped allowance would be treated as overheads.

c. Consumable

Consumable are classified in two categories, namely P- Stores, i.e., Project Stores and G-Store, i.e., General Stores.

i. P. Stores

P-Stores are the stores which are specifically required for the projects. Purchase of P-Stores will be processed by the Purchase Section on a requisition received from the Project leaders/scientist indicating the title and code number of the project. Incidence of the cost of such stores will be taken from the bills paid by the Finance & Accounts Section.

ii. G- Stores

G-Stores are the stores which are consumed by more than one project and are required for common use. Such stores will be procured in bulk quantities and stocked in the stores. Procurement of these stores will be processed quarterly, halfy or yearly as may be convenient, based upon the average consumption experience of previous years. Such procurement will be done against the budget allocations made for G-Stores as notified by PME Cell. A separate code number is allotted by PME Cell for the procurement of G. Stores.

iii. Issue, pricing & Accounting of G-Stores

G-Stores will be issued by stores to particular project against the requisitions received from project leaders/scientist/divisions indicating the project title/code number. Pricing of G-Stores will be done by the Stores Section on the basis of weighted average cost per unit. Stores Officer win prepare a monthly summary sheet as given in proforma XVI and send it to the PME Cell for posting against respective project account.

d. Capital

i. Equipment

Cost of capital equipment specifically procured for the projects will be debited to the concerned project. Other equipments either for general purpose or required for more than one project will be treated as Divisional inventory or General Facility. Cost of utilisation of such equipment will be debited to the project to the extent of their utilization in a particular project. Method of depreciation recommended is straight line method and the projects could be charged at the day rate or hourly rate as may be convenient. If an equipment has been earlier bought specifically for a project and its cost debited to that is shifted at a later date the some other project, the necessary credit entry should be given in the project by crediting the depreciated value of the equipment.

ii. Work & Services

For works and services specifically carried out for a project, the cost will be debited to the project. In other cases, the cost will be shown as general facility of laboratory/general infrastructure.

iii. Vehicle

Cost of operational vehicle will be accounted similar to those of equipment. For general purpose vehicle, it will form part of the laboratory/general infrastructures. Cost of operation and maintenance of general purpose vehicles will be accounted for in the general overheads.

iv. Furniture, library books, journals and model & exhibits

Cost of above items will be debited to Lab./general infrastructure and no depreciation charges on this account will be reflected for their use in the projects.

4.2 Indirect Cost

a. Lab. Facilities

Cost of Administration, Accounts, Purchase and Stores Sections. watch and ward. Library and Documentation, contingent expenditure such as water, gas, stationery telephones, petrol and maintenance of building and services etc. etc., will be charged to general overheads. Unabsorbed cost of service divisions, such as Workshop, photography, Animal House, etc., will be treated as part of general overheads

b. Divisional Overheads

Salary of such staff as working in a division but not particularly attached to the project such as typist. steno. tracers, welder, peon, helper etc. will form part of the divisional overhead. Besides the following other elements will also be included :-

- (i) cost of unallocated time of scientific & technical staff who are required to perform administrative functions such as preparation of reports, statements etc.**
- (ii) Depreciation of equipments not accounted for in particular projects.**
- (iii) Cost of consumable stores used in the division but not chargeable to a particular project.**
- (iv) Any other contingent/miscellaneous expenditure of the division.**

4.3 Allocation of Overheads

The total cost of all the General Overheads items should first be allocated to divisions on the basis of manpower working in each Division, for example,

Division No.	Number of persons
X1	120
Y1	136
Z1	142

Total : 398

Let X be the total of General Overhead

Then the allocation will be

For Dn X1 will $120 \times X$

398

For Dn Y1 will be $136 \times X$

398

For Dn ZI will be $142 \times X$

398

The apportioned general OH is added to the Divisional Overhead to form the total overhead in respect of each Division and then apportioned to the projects of that Division on the basis of Direct wages (DW) of each project.

Division - XI

Projects

PI Rs. 2,450 Let Dn O.H. be a

P2 Rs. 3,260 Apportioned

General OH b

P3 Rs.4,150

Total OH a+b

Total D.W Rs. 11,960

Rate of Absorption = $(a+b)$

11,960

This can be worked out as a percentage.....

This indicates that for a rupee of direct wage what would be amount of indirect expenses.

Note : For case study kindly refer to Proforma XV.

4.4 Miscellaneous

An element of expenditure which can not be grouped under any of the categories mentioned in the cost sheet could be accounted for under this category.

5. Role of Various Sections in Project Cost Accounting

5.1 Role of Finance & Accounts Section

1. Finance and Accounts Division will be required to ensure that all the bills passed by them contain classification both conventional as well as project wise/cost centre wise with Code Number.

2. Similarly while making posting of bills in the classified abstract, expenditure relating to specific projects will be signified by (p) under the Conventional Budget head. This will facilitate the apportioning of expenditure to the projects and general O.H. by PME Cell. F&A.0 will personally ensure that information/records needed by PME Cell for compilation of cost accounts are made available to them within the prescribed time schedule. He would be extended all facilities and cooperation in this regard

5.2 Role of purchase

In order to provide required information to PME, the purchase Section would undertake the following respective tasks :

- i) To indicate project code numbers on all the purchase proposals, supply orders and sanctions issued by them.
- ii) To maintain records of all the project wise approvals given by EC regarding procurement of equipments, and other major items.
- iii) To intimate all the project leaders /coordinators/Heads of the divisions, to carry over purchase commitment figures project wise in the beginning of the financial year in order to facilitate decision making regarding budgeting & allocation of resources. (Proforma XIII).
- iv) To indicate at the time of taking sanctions for purchase of stores : (a) financial budget head, (b) project code number, (c) total allotment for the project, (d) total progressive commitment of the project, and
- v) To indicate on the suppliers bill, the project code number along with financial budget head.

5.3 Role of Stores

- i) To provide efficient services to the project leaders by catering to their requirements of material inputs and to furnish to PME Cell project wise accounts of the materials drawn by the projects during each month. (Proforma XVI)
- ii) To issue the stores against the project code numbers.

5.4 Role of administration

- i) Administration will endorse copies of all new appointments, resignations, transfers, deputations, leave for all the personnel of the Labs./Instts. to the Head, PME Cell for his information and necessary action.
- ii) All communication issued by Administration having bearing on project budgeting & project cost accounting will also show "Project title & Project Code No."

- iii) Administration will co-ordinate in preparation of Annual plan for infrastructural facilities such as Administrative, Finance, Stores, Purchase, Maintenance, Watch & Ward, Medical Facilities, Workshops, Glass Blowing and Animal House, etc.

5.5 Role of Service Sections

Various Project Leaders will indent on the services of various service Sections from time to time. Such services are requisitioned in the form of job orders. After execution of jobs, the Heads of Service Sections will send the monthly summary of the job cards (Proforma XVII) indicating the project code number duly priced to the PME Section for posting against the Project Accounts.

6. Monitoring/Evaluation & Review - Milestones

The Head of PNM Section will place before the Internal Committee periodically the statement of progressive expenditure incurred on each project along with the physical progress as intimated by the Project Leader for review. Observations made by the, Internal Committee will be forwarded to the concerned project leader for taking remedial measures, if necessary. Monthly statement of expenditure incurred on each project will have to be sent to project leaders for their perusal.

In order to achieve the purpose of decision making through correlation of physical progress with financial expenditure incurred, it is necessary to build up rigorous planning methods in terms of PERT/CPM by identifying activities or tasks with time schedule and cost for each milestone of the project.

(CSIR letter No. 2(19)/84-Finance, dated 26th May, 1984)