

105th FoCARS

Foundation Course For Agricultural Research Service

NAARM *Digital Repository of
Course Materials*



Core Research Skills

- Generating Research Questions and Formulation of Testable Hypotheses
- Techniques for Research Prioritization in Agriculture
- Research Programme Planning
- Project Management Techniques
- Screening and prioritizing field level options
- Quantitative Techniques for Research Prioritization in Agriculture
- Project Logical Framework
- **Research Project Budgeting**
 - Impact Assessment of Agricultural Research and Development projects
 - Economic Evaluation of Research Projects
 - Writing a Research Proposal for External Funding
 - How to Write a Review Paper
 - Research Project Planning Toolkit
 - On Being a Scientist: A Guide to Responsible Conduct in Research

Course Coordinators

K. Kareemulla and S. Ravichandran

Support Team

P. Krishnan and P. Namdev

RESEARCH PROJECT BUDGETING

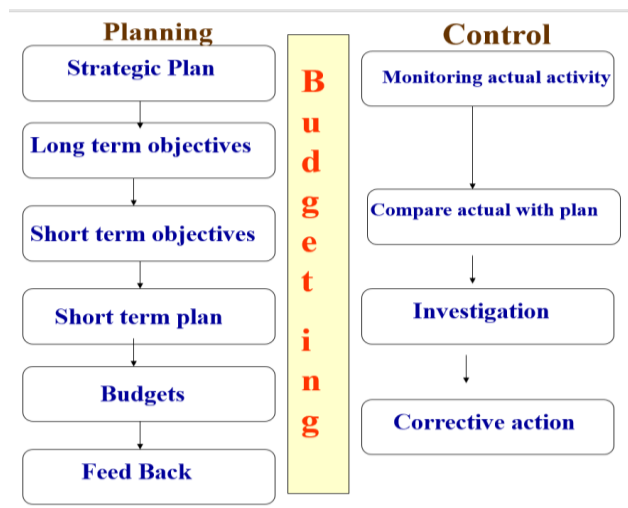
K.Kareemulla¹

The research budget is a line item (tabular) representation of the expenses associated with the proposal project. A budget is a formal plan of action expressed in monetary terms. An operational **budget** concerns the development of detailed plans to guide operations throughout the budget period.

The Budget Justification contains more in depth detail of the costs behind the line items, and sometimes explains the use of the funds where not evident. Budgeting involves planning and control which take care of-

- Planning the future activities of the organization.
- Providing a guide to employees and a benchmark against which actual results can be compared.
- Continuously analyzing variations from plans and taking corrective action as needed.
- Incorporating information on changing circumstances into future plans.

The same can be illustrated as below:



¹ Principal Scientist, RSM Division, NAARM

Reasons for Budgeting

- ✓ Budgets compel planning.
- ✓ Budgets improve communication and coordination among organization elements.
- ✓ Budgets provide a guide to action.
- ✓ Budgets provide a basis for performance evaluation

Approaches to Budgeting

There are broadly two approaches for budgeting –

Budgeting with unit level cost drivers

- ✓ Output/Input Approach

Budgeting with non-unit level cost drivers

- ✓ Incremental Approach
- ✓ Minimum Level Approach
- ✓ Zero-based Approach (no ref to past plans)

Budget Preparation Process

As mentioned earlier budgeting involves determination of costs associated with defined activities. The steps in budgeting are highly dependent upon both the estimated length of tasks and the resources assigned to the project. One also needs to identify the cost factors to develop the budget. Often budget estimates are obtained from the people who will be involved in the specific tasks / activities of the project.

Some of the major issues/ concerns at different stages of the budget life cycle are as follows:

Stage of the Project	Stakeholder	Concern
Pre award	PI	How much will it cost to do this project
	Dept/ Division	Any cost sharing obligations?
	Outside funded projects	Does it meet sponsor needs
	Peer review	Whether budget reasonable for the work scope

Award	Director/sponsors	Are there funds available for the proposal? Can it be done at a lower budget?
	PI	If the budget is cut, are there changes to be made?
Post Award	PI/Sponsors	Costs compliance; can we afford this; any variations in budget over time; change of scope etc
Close (completion)	Auditing	Reconciliation, aberrations etc.?

There are a few key obstacles which often are encountered by people when budgeting for research projects. They are-

- Accuracy???
- Prediction of Outcomes and their values?
- basic research outcomes can't be valued always
- Time allocation and costs thereby sometimes may not be sacrosanct
- Many invisible items go unaccounted

Generally, the broad components of research project budgeting will be:

- Staff salaries
- Indirect costs
- Equipment
- Consumables
- Travel and subsistence
- Justification of resources
- Research Incentives Policy and teaching buyout
- Ineligible costs

The projects must be carefully costed to ensure that

- all the important costs are included so as to be able to conduct the research to the highest quality
- only acceptable costs have to be met by the Institute/ University
- varies with project and School
- the included costs are justified by the work content

Generally full economic costing with the object of recovering all costs from the funding agency must be adopted.

The type of funds one can account for in the research project budget will be of the following nature:

- ✓ Costs are usually split into direct and indirect
- ✓ Staff – directly working on the project (over and above standard allocations for permanent staff)
- ✓ Equipment – usually over a defined cost limit, rules about allocated cost may apply, may be upper cost limit
- ✓ Consumables – materials directly used on the project
- ✓ Travel and subsistence – meetings, conferences, visits directly related to the project work or to disseminate the results
- ✓ Other costs – insurance, auditing, student fees etc.
- ✓ Overheads (varies considerably with funder: 5-20 %)

Components of Research Budget as proposed in the Madan Committee (Proformae and Guidelines for Research Project Proposal, Monitoring and Evaluation) are:

A) Financed by the institute

1. Manpower (Salaries / Wages)

S. No.	Staff Category	Man months	Cost
1.	Scientific		
2.	Technical		
3.	Supporting		
4.	SRFs/RAs		
5.	Contractual		
	Total		

2. Research/Recurring Contingency

S. No.	Item	Year(1)	Year (2)	Year (3)...	Total
1.	Consumables				
2.	Travel				
3.	Field Preparation/ Planting/ Harvesting (Man-days/costs)				
4.	Inter-cultivation & Dressing (Man-days/costs)				
5.	Animal/Green house/Computer Systems/Machinery Maintenance				
6.	Miscellaneous(Other costs)				
	Total(Recurring)				

Justification : -----

3. Non-recurring (Equipment)

S. No.	Item	Year (1)	Year (2)	Year (3)...	Total
1.					
2.					
.					
	Total (Non-recurring)				

Justification : -----

4 Any Other Special Facility required (including cost)

4. Grand Total (1..5)

Item	Year (1)	Year (2)	Year (3)	Total
Grand Total				

(B) Financed by an organization other than the Institute (if applicable)

(i) Name of Financing Organization

(ii) Total Budget of the Project

(iii) Budget details

S. No.	Item	Year(1)	Year(2)	Year (3)...	Total
1	Recurring Contingency				
	Travelling Allowance				
	Workshops				
	Contractual Services/ Salaries				
	Operational Cost				
	Consumables				
2	Non - Recurring Contingency				
	Equipment				
	Furniture				
	Vehicle				
	Others (Miscellaneous)				
3	HRD Component				
	Training				
	Consultancy				
4	Works (i) New (ii) Renovation				
5	Institutional Charges				

As per the ICAR guidelines for Professional Service Functions, 2014, that come under the category of contract/ consultancy projects, the project costing norms will be as below:

Direct expenses	Indirect expenses
Man-days costs	Salary of manpower involved in the project
TA/DA	
Consumables (chemicals, glasswares, raw materials, components etc)	
Equipment usage costs	
Institutional charges	
External payments (actual cost towards fees for payments towards hiring outside consultants, obtaining external data/information, hiring of	

infrastructural facilities, etc)	
Insurance cover	
Contingencies	
Intellectual fee (for compensating the time spent by manpower)	
Taxes payable	



भाकृअनुप-राष्ट्रीय कृषि अनुसंधान प्रबंध अकादमी
राजेन्द्रनगर, हैदराबाद-५०००३०, तेलंगाणा, भारत
ICAR-National Academy of Agricultural Research Management
(ISO 9001:2008 Certified)
Rajendranagar, Hyderabad-500030, Telangana, India
<https://www.naarm.org.in>

