RESOURCE PLANNING AND BUDGET

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Outline

- Research Proposals
- Application form
- Planning
- Resources
- Activities
- Gantt Charts
- Budget
• Largely based on individual concepts and expertise
• Issues are aligned to researcher’s speciality
• Basic/Applied research? Development oriented? partner involvement?
• Do we relate the research hypothesis/question to the kind of aspects in the next two slides?
• Significance of research outputs of the project
  - Industries (high-tech/Agro industries, Manufacturing, Service, Health Care)
  - Human resource development in R & D
  - Formulation of evidence based policies/guidelines
  - Other researchers
• Relevance and impact of research outcomes to national / socio-economic development
  - Will the results have any effect on poverty alleviation?
  - Will the results contribute to improving the well-being of the people?
  - Environmental sustenance

• Analysis of the problem & rationale of the research question

• Comprehensive literature review

• General and specific objectives of the proposed work

• The activities in experimental design

• Work Plan (Gantt Chart)

• Indicators and Milestones of progress
• Do you think while filling the form or before?

• Do you plan while filling the form or before?

• If you ‘fail to plan’

• then you are ‘planning to fail’
At the proposal planning stage itself:

- Link the research to the national / societal needs as far as possible
- Breakdown the project into manageable activities on a rational basis
- Time the activities for effective implementation
- Develop the budget based on the activities

A Project is a set of activities which ends with specific accomplishments and which has:

- Non-routine tasks
- Distinct start/finish dates and
- Resource requirements (time/money/people/equipment)
Resource/Budget Planning

• How the resources will be applied to the project activities

• It includes the identification and deployment of the human as well as physical resources

• Resource/budget planning links with scope planning and schedule planning

• Resource planning and budgeting is a two-step process for determining and detailing long- and short-term goals of a project
Identify and allocate resources - Feasibility

Human Resources to carry out the project

- Principal Investigator, Co-Investigators, Collaborators
  - Knowledge
  - Training
  - Research experience related to the proposed work

- Research Student, Technical Assistant, Labourer
Other resources (Physical) and support services

- Working environment
- Lab space
- Equipment and other facilities required
- Animal house
- Time
- Money
Tasks are activities that must be completed to achieve the project goal

- Break the project into small tasks and subtasks
- Tasks have start and end points, are relatively short and significant
- Shorter tasks are easier to manage than long tasks
- Must not have too many tasks. Easier to monitor
- Some tasks can be done concurrently, while others have to wait for the previous task to be completed
A Gantt Chart is a visual project planning tool that gives us an overview of the project.

Gantt Charts are simple to understand and easy to construct.

They are used to represent the timing of tasks required to complete a project.

Each task takes up one row. Dates / Time period run along the top.

Tasks may run sequentially, in parallel or may be overlapping.
<table>
<thead>
<tr>
<th>Activity</th>
<th>FIRST YEAR</th>
<th>SECOND YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specimen collection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laboratory experiments</td>
<td>J F M A M J J A S O N D</td>
<td>J F M A M J J A S O N D</td>
</tr>
<tr>
<td>Data analysis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manuscripts for local and international journals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final report preparation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Gantt charts allow us to obtain a bird's eye view of the project in its totality. The charts force us to:

- Make a realistic assessment of the end-time of the project
- Sequence our tasks (or phases, or activities) - one after the other, as well as in parallel
- Think in terms of task dependencies - which task is dependent on what
- Concentrate on the necessary resources, both when and where, throughout the run of the project
- Monitor the progress effectively
A set of activities will end up with a Milestone

Milestones are important checkpoints or interim goals for a project. They can be used to track project progress and accomplishments.

Milestones make project management easier, help to define project priorities, monitor progress and tell a more meaningful "status story".

It also helps to identify risk areas for project and to catch scheduling problems early.
Budget

Budget summary

* Budget must be in line with current NSF payment rates

Research Personnel

- **NSF Research Scientists** should have MSc / MPhil / PhD and work full time with the Principal Investigator (PI). Can be allocated only for PIs with adequate research experience as decided by the NSF.

- Full-time **Research Students** registering for a Postgraduate Degree (MPhil / PhD) can be allocated only for PIs with two or more years of postdoctoral research experience.

- **Technical Assistants** can be with O/L or A/L qualifications

- **Labourers** hired for field work, payment as per Govt. approved rates

*For PIs who have not received any Research Grants before (NSF or other funding sources), total budget should not exceed Rs 1.5 M, excluding allocations for Research Personnel.*
Equipment

• List all the items of equipment with justification.
• Budget for equipment should not exceed 50% of the total budget
• If an equipment costs more than Rs. 750,000/=, should apply through the Equipment Grant Scheme
• Computers: strong justification necessary (laptops should be returned to the NSF at the end of the project)
• Consumables (quantity, cost etc.,)
• Laboratory services and sample analysis (if outsourced)
• Statistical Analysis
• Calibration of instruments
• Postgraduate registration fees of Research Student (only for one student)
• **Travel** (vehicles of the Investigator’s Institutions)
Budget contd....

Miscellaneous

• Should not exceed 10% of the total budget
  ➢ Stationery
  ➢ Data storage devices
  ➢ Photocopying etc.

(does not include administrative cost, Equipment maintenance, consultancy, preparation of final report, computers and printers for routine work, advertisement, contingencies etc., )
Common mistakes observed

- Hard copy and the soft copy are contradictory
- Figures given in the budget inaccurate
- Requesting driver’s O/T, subsistence from NSF
- Quantity and cost of Consumables not mentioned
- Proper justification for Equipment not mentioned
- Budgeting for attending workshops and seminars
- Miscellaneous budget over 10% of the total budget
- Requesting funds for contingencies, unforeseen expenditure
- Totaling of the budget not done
- Not forwarding through proper channels
- Supporting documents not attached (bio data, ethical clearance etc.)
THANK YOU