NATIONAL SCIENCE FOUNDATION

Resource Planning & Budget

Dr. Geethika Yapa
Head - Research Division
NSF

Application form – Some important aspects

Significance of the research outputs of the project

For example:

- High-tech industry
- Manufacturing industry
- Agro industry
- Human resource development in R & D
- Formulation of evidence based policies/guidelines

Application form – Some important aspects contd…

- **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**
- **General and specific objectives of the proposed work**
- **The activities in experimental design**
- **Work Plan (Gantt Chart)**
- **Indicators and Milestones of progress**

Research Proposals

Competitive Research Grants

- largely based on individual concepts and expertise
- Issues are aligned to researcher specialty

Application Form

- 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’

Topics covered

- Linking project to outcomes
- Breakdown into activities
- Gantt Charts
- Budget

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 constraints (time/money/people/equipment)

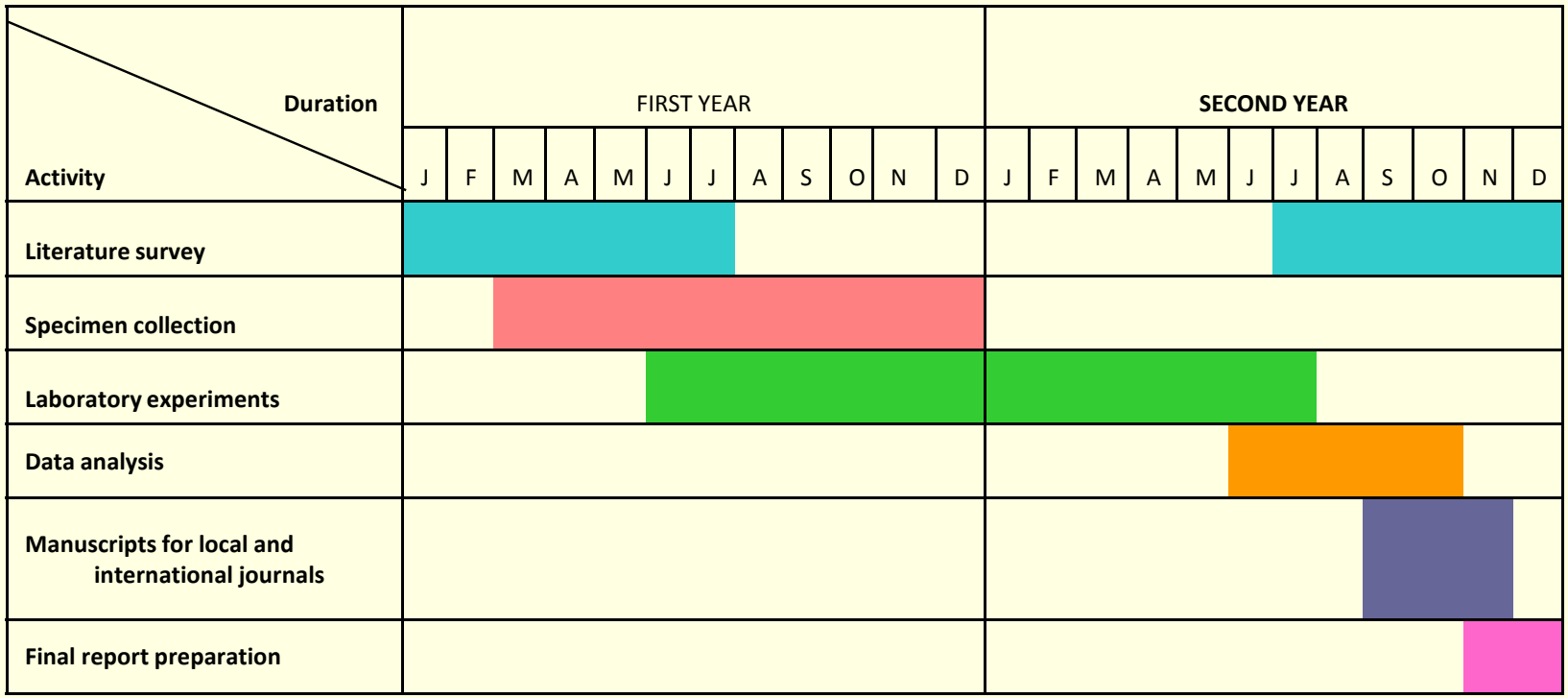
Activities / Tasks

- 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 short relative to the project and are significant
- Shorter tasks are easier to manage than long tasks
- Must not have too many tasks in the Chart. Easier to monitor
- Some tasks can be done concurrently, while others have to wait for the previous task to be completed

Work Plan - Gantt Charts

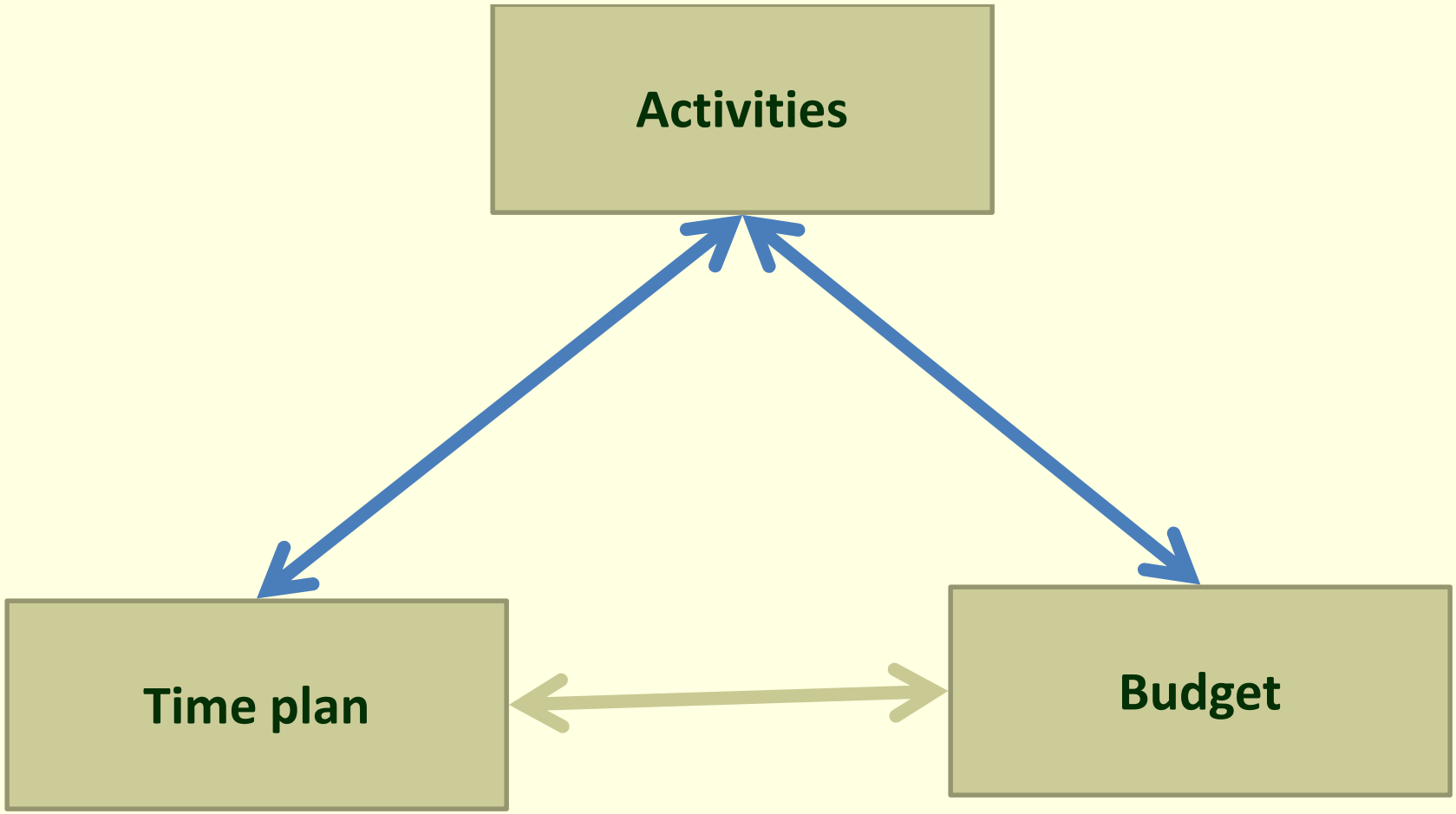
- A Gantt Chart is a visual project planning tool that gives us an overview of the project.
- Gantt Charts are simple to understand and easy to construct.
- They are used to represent the timing of tasks required to complete a project.
- Each task takes up one row. Dates / Time period run along the top.
- Tasks may run sequentially, in parallel or may be overlapping.

A Simple Gantt Chart



Milestones

- 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 catch scheduling problems early.
- The plans will evolve as the project progresses so need to be flexible and need to update on a regular basis.
- It also helps to identify risk areas for project.


Activities
Time plan
Budget

Summary Budget – NSF Research Grants

	1st Year	2nd Year	3rd Year	Total
(1) Personnel				
(i) NSF Research Scientist*				
(ii) Research Student**				
(iii) Technical Assistant				
(iv) Labour/Other				
Sub Total (Personnel)				
(2) Equipment* **				
Sub Total (Equipment)				
(3) Consumables				
(4) Laboratory services and sample analysis				
(5) Statistical analysis				
(6) Calibration of instruments				
(7) Postgraduate registration fees				
(8) Travel & Subsistence				
(9) Miscellaneous				
GRAND TOTAL ****				

Budget

Research Personnel

- **NSF Research Scientists** should have a postgraduate degree (MPhil / PhD) and work full time with the Principal Investigator. NSF Research Scientists can be allocated only for Principal Investigators with adequate research experience.
- Full-time **Research Students** can be allocated only for Principal Investigators with two or more years of postdoctoral research experience.
- **Technical Assistants** can be with O/L or A/L qualifications

For Principal Investigators who have not received any Research Grants before (NSF or other funding sources), <u>total</u> budget should not exceed <u>Rs One Million</u>, excluding allocations for Research Personnel.

Budget contd…Allowances of Research Personnel

- Monthly allowance of **NSF Research Scientists**
  - Full time - 40,000/= p.m.

- Monthly allowance of **Research Students**
  - Sp. Degree/ General Degree/ Equivalent Degree and Registered for a postgraduate degree - Rs. 35,000/= p.m.
  - Not registered for a postgraduate degree - Rs. 25,000/= p.m.

- Monthly allowance of **Technical Assistants**
  - With G.C.E. (A/L) in 03 subjects - Rs. 13,500/= p.m
  - Without the above qualification - Rs. 12,000/= p.m.

- **Labourers** - Rs. 397.66 + C.O.L Rs. 70.83 per day - according to government approved rates

Budget contd…Subsistence

Subsistence rates – paid according to Government Circulars

- Investigators - Rs. 500/=
- Research Scientist - Rs. 500/=
- Research Student - Rs. 500/=
- Technical Assistant - Rs. 400/=

- Overnight stays – additional 25%

Budget Contd…

Equipment

- List all the items of equipment.
- Budget for equipment should be less than 50% of the total budget
- If an equipment costs more than Rs. 500,000/=, should apply through the Equipment Grant Scheme
- Computers: strong justification necessary (laptops should be returned to the NSF)

Budget continued…

- Consumables
- Laboratory services and sample analysis
- Statistical Analysis
- Calibration of instruments
- Postgraduate registration fees of Research 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.

Common mistakes observed

- Figures given in the budget inaccurate
- Requesting driver's O/T, subsistence from NSF
- Budgeting for attending overseas workshops and seminars.
- Miscellaneous budget over 10% of the total budget
- Requesting funds for communication charges, contingencies, unforeseen expenditure
- Supporting documents not attached (bio data, ethical clearance etc.)

Thank you