



*Defining the Future*

## **Template for Preparation of Detailed Project Report (DPR) in r/o Health for KIIFB Assistance**

## **Guidelines for preparing Detailed project Report**

A detailed Project Report is an essential component of the project. It should be prepared carefully. Before finalising the DPR, importance should be given to carry out proper surveys, investigations and designs. Sufficient details should be included to ensure proper appraisal, approval and implementation of the project in time. Considering the importance of DPR preparation, a document intended for reference is detailed along with. The guidelines provided in this document shall be adhered to strictly. In addition, SPV can incorporate specific additional relevant details to supplement the base data.

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## 1. SALIENT FEATURES

1.	Title of the project	
2.	Details of project location	
	i. District	
	ii. Taluk	
	iii. Corporation/Municipality/Panchayath	
	iv. Assembly Constituency	
3.	Implementing agency/SPV	
4.	DPR prepared by	
5.	Project outlay	
6.	Budget provision	
7.	Budget speech reference	
8.	Administrative sanction	
9.	Nature of the project (New buildings/ renovation of buildings)	
10.	Present status of existing buildings, if any	
11.	Need for the project	
12.	Details of proposed building	
	i. Number of blocks proposed	
	ii. Number of storeys of building	
	iii. Total area of each block	
	iv. Other details of building	
13.	Details of investigations/surveys conducted	
14.	Total estimated cost with item wise cost break up and details of Schedule of Rates	
	Whether detailed estimate attached?	
	Whether technical specifications of the medical equipment attached, if any?	
15.	Details of revenue streams	

16.	Details of Cost Benefit Analysis (CBR value)	
17.	Details of project risks	
18.	Details of project management organisation strategy	
19.	Details of contract management strategy	
20.	Details of Project Implementation Schedule (PIS) & Work Breakdown Schedule (WBS) - Proposed duration to complete the project	
21.	Details of statutory clearances	
22.	Quality control infrastructure and mechanism	
23.	Operations & Maintenance (O&M) arrangements of the project after completion	
24.	Details of attached drawings	
25.	Other attachments	

## **2. EXECUTIVE SUMMARY**

This section shall contain brief of all relevant details discussed in the following chapters.

## **3. INTRODUCTION**

- This section should provide a general introduction of the project being submitted.
- General introduction shall include write up on: type of the project, location of the project area, general description of topography, physiography and geology of the project area, historical background of the project, need for the project, specification of the machines/equipments to be purchased, etc.
- Aims and objectives of the project shall also be briefed in the section.

## **4. PROJECT DEFINITION, CONCEPT AND SCOPE**

- The proposed project has to be clearly demarcated in terms of all its sub-components/elements including details of equipments to be purchased with AMC, the design, detailed engineering and drawings of each physical infrastructure sub components, environmental compliance,/protection measures/improvement measures .

## **5. PROJECT BACKGROUND**

- A brief description of the existing facilities for serving the purpose, if any, in the project area, its present condition and need for the present project..

## **6. PROJECT DETAILS**

- Description of the equipments to be purchased, civil works to be done for installing the equipments, details of work relating to the modernization and upgradation of hospitals, rationale behind the project etc should be included.

## **7. OBJECTIVE AND SCOPE OF THE WORK**

- A brief note about the necessity of the works proposed under the project

and the main works to be carried out to fulfill the objective.

## **8. STATUS FEASIBILITY STUDIES**

- Description of any feasibility study conducted earlier and their outcome shall be discussed in this section.

## **9. REQUIREMENT/ DEMAND ANALYSIS**

- This section should present the specific problem(s) or issue(s) faced by stakeholders like citizens, businesses or governments that would be addressed by means of provision of improved services through the proposed project.
- In this section, describe the project proposed in terms of the rationale behind the project, clearly focusing on the existing condition (how it will help in improving the situation and bring benefits to the stakeholders).
- The rationale could be broad based and supplemented with facts and figures. Information based on objective research, not subjective impressions, should be provided to justify the need or problem. The rationale should be written in a way that would lead to objectives.

## **10. FUNCTIONAL DESIGN**

- This section should present an analysis of different options available to achieve the objective and the reasons for selecting the proposed option should be substantiated.
- Form and structure of the existing Hospital, the Institute and the proposed expansion should be detailed.
- The functional design of the project is mainly achieved through field study and documentation using existing information and specifications from various standards.
- In case of buildings, area quantification of the requirements should be mentioned in the report, also the methodology adopted in arriving the total area of each building should be clearly specified.
- The location shall generally be governed by several factors like easy accessibility and minimum requirement of land acquisition/demolitions, if any.
- History of functioning of existing/nearby building/equipments in the project location, if any, under adverse conditions, damage to structure, maintenance problems etc. shall be considered.

- The structure shall be planned as to get the most economical design and at the same time satisfy specific requirements, if any.
- The design of the building/ installation space of medical equipments shall be considered as one which results in minimum construction cost, at the same time achieve and maintain an acceptable standard of quality of care.
- The building proposed shall satisfy all the rules and regulations laid down in the codes and manuals published by concerned authorities like Bureau of Indian standards (BIS), Medical Council of India, Ministry of Health & Family Welfare (Indian Public Health Standards) etc.

## **11. ENGINEERING DESIGN**

- This section should elaborate the technology choices, structural aspects, foundation options and evaluation of the technology option, as well as the basis for the technology for the proposed project.
- Detailed description of site including topographical and geotechnical investigations adequate to choose the suitable foundation shall be furnished.
- The structural layout shall be so planned that the viability of adopting state of the art large span arrangements like flat slab, grid floor slab, ribbed slab, pre-stressed panels etc. shall be explored with a view to bring in maximum utility, aesthetics, economy etc.
- The preliminary design for a typical building project shall consist of architectural drawings of the proposed buildings, including floor plans, elevations, sections, site plans etc. conforming to the guidelines laid down in the relevant building bye laws and manuals.
- Detailed technical specification of goods, hospital equipment, furniture etc. shall be furnished in the report. The equipment planning should be made as required for the standard health facility.
- Environmental pollution control, bio-medical waste treatment, disposal etc. should be included in the design.
- New innovations like green building concept may be incorporated in the design of the buildings.

## **12. FINANCIAL ESTIMATES & COST PROJECTIONS**

- This section should focus on the cost estimates, budget for the project, means of financing and phasing of expenditure.



- Cost estimates have to be worked out on the basis of detailed bill of quantities (with detailed measurements of length, breadth, and depth / height for each item), using the current Schedule of Rates of the State Government (PRICE) or relevant SOR as applicable.
- Applicable taxes, contingencies, investigation charges including any O&M cost for a specific period shall be clearly specified.
- AMC of medical equipments should be duly projected and budgeted.
- Lumpsum provisions for land acquisition, medical equipment etc. shall be explained in detail.

### **13. REVENUE STREAMS**

- Options for cost recovery, if any, should be explored
- Innovative ideas for additional revenue generation may be indicated.

### **14. COST BENEFIT ANALYSIS & INVESTMENT CRITERIA**

- Cost Benefit Analysis (CBA) is a technique whereby the costs of and benefits from a scheme are quantified over a selected time horizon and evaluated by a common yardstick.
- Financial and economic cost benefit analysis of the project should be undertaken wherever such returns are quantifiable and is possible for infrastructure buildings like hospitals.
- Cost Benefit Ratio (CBR - benefit to cost ratio), EIRR (Economic Internal Rate of Return) etc. shall be worked out in detail with all supporting primary and secondary data.
- The project cash flow projections for the life cycle along with underlying assumptions have to be presented.

### **15. ENVIRONMENTAL & SUSTAINABILITY ASPECTS**

- An Environmental Management Plan (EMP) is to be developed explaining the possible environmental issues which may arise during the construction and operation of the infrastructure and associated facilities depending upon the size of the project.
- Environmental impact assessment study if mandatory and measures identified to mitigate the adverse impact, if any shall be conducted and documented in detail.
- Issues relating to land acquisition, rehabilitation and resettlement should be addressed in this section.

- Inclusion of international best practices in sustainable infrastructure management including green building concept, potential low carbon, low energy, zero pollution etc. are desirable.

## **16. RISK ASSESSMENT AND MITIGATION MEASURES**

- For those projects which involves large capital outlay and various issues relating to land acquisition, environmental aspects, a detailed and systematic risk analysis may be resorted.
- Identification and assessment of implementations risks which can lead to time overrun, cost escalation, scope reduction etc. is the primary stage in risk assessment.
- Risk analysis could include legal/contractual risks, environmental risks, revenue risks, project management risks, regulatory risks etc.
- The mitigation plans including risk avoidance, risk transfer, and risk elimination are to be well analysed and documented.
- For complex projects with multiple risk profiles, numerical modelling and simulation may be adopted.

## **17. PROJECT MANAGEMENT ORGANISATION**

- Responsibilities of different agencies for project management of the said project should be elaborated. The organization structure at various levels, human resource requirements, as well as monitoring arrangements should be clearly spelt out.
- Management arrangements refer to the institutional structures and mechanisms that would be set up for ensuring effective project management.
- The involvement of external consultant if any shall be documented

## **18. CONTRACT MANAGEMENT STRATEGY**

- Contracting methodology for the execution of the project should be specified in detail. (item rate, lumpsum, design and execute , EPC etc.)
- The system followed in the bidding document and manuals of reference etc. shall be explained (PWD/CPWD/ FIDIC) etc.
- Any variation proposed from the current practices acceptable under govt of Kerala (Arbitration, escalation etc.) in the system due to any specific technical aspects associated with the project need to be explained with justification.

- Any contract clause which may likely to lead to additional financial liability shall be identified and reported with suggestions to overcome such issues.

## **19. IMPLEMENTATION SCHEDULE & WBS**

- The time bound work schedule is an important part of every project because it helps in better handling of projects in planning, implementation etc.
- This section should indicate the propose zero date of commencement and also provide a Bar chart / Project Schedule, wherever relevant.
- Phasing of project activities, proposed contract packages and schedule of implementation for each phase.
- Identify critical dependencies in the project and expected timelines for completion of key milestones and associated process indicators for the same.
- The DPR should provide a time-bound action plan including tendering, appointment of contractors, construction schedule,, quality assurance & quality control and post-construction activities, including project delivery

## **20. STATUTORY CLEARANCES**

- This section should elaborate the statutory clearances to be obtained from the various authorities.
- Statutory approvals as per bye laws, master plan, fire safety norms, environmental clearance etc. as applicable for the project are to be taken.

## **21. QUALITY MANAGEMENT PLAN**

- The DPR shall include information relating to the institution to be engaged in the quality assurance & quality control of the project execution.
- Methodology to be adopted to ensure the quality of construction should be clearly mentioned in the report.
- Quality management plan including the internal inspection and testing procedure shall be documented.
- Third party quality control mechanism is adopted its structure and plan shall be specified in detail.

## **22. OPERATIONS & MAINTENANCE PLAN**

- The DPR shall incorporate/include information relating to the institution to be engaged in the O&M of the created infrastructure asset/enhanced infrastructure assets.

- Brief description/analysis of the key issues and obstacles in regard to O&M (including billing/collection issues) and proposed countermeasures to overcome them for the project should be contained.
- Requirement of funds for operation and maintenance of assets should also be included in the report.

## **ANNEXURES**

- I. DETAILED ARCHITECTURAL DRAWINGS OF THE BUILDINGS (Including floor plans, sections, elevations, site plans etc.)
- II. DETAILED ESTIMATE
- III. GEO-TECHNICAL INVESTIGATION REPORT
- IV. COPIES OF STATUTORY APPROVALS