

## GOVERNMENT OF THE PUNJAB PLANNING & DEVELOPMENT BOARD (SHC&ME SECTION)

# WORKING PAPER FOR PDWP

#### **PART-A**

### **Project Profile**

1.	Project Titl	le		Feasibility Study (International) for Establishment of Medical Cities across Punjab				
2.	Location			Punjab				
3.	Sponsoring	g Agency		Specialized He	ealthcare & Medica	I Education De	partment	
4.	Executing	Agency		Specialized He	ealthcare & Medical	Education Dep	partment	
	Total Prop	osed Cost				(Rs. in million)		
	Component Pr		Pr	roposed Cost Proposed Cost Diffe		Difference		
5.		bet		ore Pre-PDWP	after Pre-PDWP	Difference		
		Revenue		46.880	25.032	(21.848)		
		Total		46.880	25.032	(21.848)		
6.	Cost in AD	Cost in ADP 2024-25			Rs.1.00 Million			
7. Allocation		in ADP 2024-2	25	Do 4.00 Million				
7.	(G.S. No.355) (New)		Rs.1.00 Million					
8.	Proposed Gestation Period			05 Months (01	05 Months (01.02.2025 to 30.06.2025)			

### 9. <u>Justification / Brief of the Project</u>

To bring about a paradigm shift in the Public Health Sector of the Punjab, Government has envisioned to establish Medical Cities across the province. Medical city can be termed as "One-Stop-Shop" for patients, in need of comprehensive medical services, including diagnostics, treatment, and rehabilitation. Furthermore, medical cities may also incorporate amenities like: hotels and accommodations for patients and families, recreational facilities and wellness centers, shopping and dining areas, transportation services and telemedicine and digital health platforms, etc. The medical cities shall consist of the advanced health care facilities providing expertise in all medical fields. The government hospitals and high standard clinics will focus on the latest trends in medical planning, operations and technology. Following major health facilities are envisioned to be covered in the proposed Medical Cities:

- i. General Teaching Hospital
- ii. Cardiovascular Institute
- iii. Institute of Cancer and Oncology Services
- iv. Molecular Biology and Genetics Institute
- v. Medical College
- vi. College of Allied Health Professionals
- vii. Pediatric Institute
- viii. Blood and Stem Cells Institute
- ix. General and Mother Child Hospital

- x. Nursing College
- xi. Centre for Clinical, Translation and Public Health Research

#### Allied facilities may include:

- i. Health clinics dental clinics
- ii. Research labs and hubs
- iii. Wellness parks / spa for yoga / meditation
- iv. Corporate wellness / pressure relief center
- v. Park accommodations and recreation
- vi. Academic campus & research park
- vii. Rehabilitation resorts and sports training with support facilities such as dormitories and staff housing
- viii. Hotels and other hospitality facilities
- ix. Specialists / therapists to provide herbal and tib medical facilities
- x. Hair and beauty clinics

Since the instant project will be the first of its kind in Punjab and will involve huge capital investment, therefore, SHC&ME Department has decided to conduct a detailed (International) Feasibility Study initially before proceeding ahead.

### 10. Main Objectives

The objective of hiring consultant firm having international exposure is to prepare a detailed feasibility study based on empirical analysis on assessing the need to determine as to whether establishment of medical cities across Punjab would be a sustainable intervention financially & economically or otherwise.

### 11. Scope of Work:

- i. Collection of project requirements / information and finalization of the same through meetings with the stakeholders and visiting the potential sites / locations
- ii. Collection / compilation of existing data related to Health facilities
- iii. Review of legal framework and existing health strategies of Punjab. The situational analysis of the existing health care landscape, density of medical personnel and preparation of estimates for the future demand of medical services based on population projections and expected incidence of diseases
- iv. Identification of weaknesses in operations of existing hospitals and proposals for improvement that need to be incorporated in proposed project
- v. Identification of potential locations / sites (of Punjab Province) for the establishment of Medical Cities, supported by data
- vi. Proposing scope for Medical Cities, for potential locations / sites, based on empirical analysis / data analysis

- vii. Separate cost estimation of establishing medical city (with its components) for each potential site / location
- viii. Identification of Technical requirements such as infrastructural, governance, information system, power / electricity requirements, equipment / tool requirements, wastage disposal mechanism, logistic requirements & procurement planning etc.
- ix. Recommend viable mode of execution of the project (i.e., Public Private Partnership (PPP), Build Operate Transfer (BOT) etc.,) supported by comparative analysis of each mode of execution with its pros & cons
- x. Operations & Management Model
- xi. Suggest measures for sustainability of the initiative
- xii. Identification of required expertise, services and relevant Human Resource for making Medical City a success model
- xiii. Workable model on integration of health care facilities, medical research institutes and related industries
- xiv. A comprehensive Cost Benefit Analysis of the project on following lines:
  - a. Explaining the rationale of the project / why there is a need of such policy change
  - b. Specifying the set of alternative projects
  - c. Identification of costs of the project:
    - Direct costs (e.g., labor, materials)
    - Indirect costs (e.g., overheads, opportunity costs)
  - d. Identification of benefits of the project:
    - Tangible benefits (e.g., increased revenue, reduced costs)
    - Intangible benefits (e.g., improved health, increased satisfaction)
  - e. Quantification of costs and benefits of project:
    - Assigning monetary values to costs and benefits
  - f. Comparison of costs and benefits of project based on following parameters with their interpretation:
    - Net Present Value (NPV)
    - Benefit-Cost Ratio (BCR)
    - Economic Internal Rate of Return (EIRR)
  - g. Evaluation of the Economic Viability of the project based on results of the following:
    - Net Present Value (NPV)
    - Benefit-Cost Ratio (BCR)
    - Economic Internal Rate of Return (EIRR)
- xv. Perform Sensitivity Analysis

- xvi. Perform Cost Effectiveness Analysis
- xvii. Prepare Implementation Plan
- xviii. Environment Impact Analysis during execution & post execution of the project
- xix. Identification of possible risks / challenges related to the project, considering the environmental, economic, budgetary and political factors etc.,
- xx. Preparation of compact Risk Mitigation Plan considering the volume of the project
- xxi. Preparation of detailed Monitoring & Evaluation Plan
- xxii. Preparation of Feasibility Study incorporating all the aforementioned points

### 12. Deliverables with Timelines:

Sr.	Deliverables	
No.	Deliverables	Duration
1.	Inception Report: The consultant firm shall prepare and submit comprehensive	02
	work plan and methodology as inception report within 02 weeks from the signing of the agreement.	weeks
2.	<ul> <li>Collection / compilation of existing data related to Health facilities</li> <li>Review of legal framework and existing health strategies of Punjab. The situational analysis of the existing health care landscape, density of medical personnel and preparation of estimates for the future demand of medical services based on population projections and expected incidence of diseases.</li> <li>Identification of weaknesses in operations of existing hospitals and proposals for improvement that need to be incorporated in proposed project.</li> <li>Identification of potential locations / sites (of Punjab Province) for the establishment of Medical Cities, supported by data</li> <li>Surveys / visits of the potential locations / sites (of Punjab Province) for the establishment of Medical Cities</li> </ul>	02 Months
3.	<ul> <li>After completing surveys / visits of potential project locations and compilation of above said information, the consultant(s) shall prepare following information / conduct analysis:</li> <li>Site / location specific scope of Medical Cities, for potential locations / sites, based on empirical analysis / data analysis</li> <li>Separate cost estimation of establishing medical city (with its components) for each potential site / location</li> <li>Recommendation of viable mode of execution of the project (i.e., Public Private Partnership (PPP), Build Operate Transfer (BOT) etc.,) supported by comparative analysis of each mode of execution with its pros &amp; cons</li> <li>Identification of Technical requirements such as infrastructural, governance, information system, power / electricity requirements, equipment / tool requirements, wastage disposal mechanism, logistic requirements &amp; procurement planning etc.</li> <li>Identification of required expertise, services and relevant Human Resource</li> </ul>	02 Months

	Workable model on integration of health care facilities, medical research	
	institutes and related industries	
	Operations & Management Model	
	Cost Benefit Analysis	
	Cost Effectiveness Analysis	
	Sensitivity Analysis	
	Implementation Plan	
	• Identification of possible risks / challenges related to the project, considering	
	the environmental, economic, budgetary and political factors etc.,	
	Remedial measures to overcome possible risks / challenges	
	• Environment Impact Analysis (during execution & post execution) of the	
	project	
	Monitoring & evaluation plan	
4.	The consultant firm shall prepare and submit a detailed Feasibility Study	02
	incorporating all the above-mentioned details (soft copy and 03 hard copies)	weeks
	within 02 weeks.	WEEKS

#### 13. Expected Outcomes of the Feasibility Study:

The intended Feasibility Study shall provide following information besides a workable model for operational & management backed by empirical analysis / data analysis

- i. Collection of data / information related to the project
- ii. Collection / compilation of the existing data related to Health facilities
- iii. Review of legal framework and existing health strategies of Punjab
- iv. Situational analysis of the existing health care landscape, density of medical personnel and preparation of estimates for the future demand of medical services based on population projections and expected incidence of diseases
- v. Identification of weaknesses in operations of existing hospitals
- vi. Proposals for improvement that need to be incorporated in proposed project
- vii. Identification of potential sites / locations for establishing Medical Cities
- viii. Site / location specific scope of medical cities
- ix. Separate cost estimation of medical cities along with its components
- x. Identification of Technical requirements such as infrastructural, governance, information system, power / electricity requirements, equipment / tool requirements, wastage disposal mechanism, logistic requirements & procurement planning etc.
- xi. Workable model on integration of health care facilities, medical research institutes and related industries
- xii. Identification of required expertise, services and relevant Human Resource
- xiii. Viable mode of execution
- xiv. Cost Benefit Analysis
- xv. Cost Effectiveness Analysis
- xvi. Sensitivity Analysis
- xvii. Implementation Plan
- xviii. Remedial measures for possible risks / challenges
- xix. Monitoring & evaluation plan
- xx. Environment impact analysis

# 14. <u>Detail of Core Team of Experts to Conduct Feasibility Study:</u>

Sr.	Name of	No. of	Man	Description
No.	Position	positions	Months	Shall lead / oversee the entire feasibility study process,
				ensuring timely completion and coordination among
				team members
				Responsible for conducting surveys / visits of potential
1.	Team Leader	01	05	sites
'-	Todiii Loadoi	01	00	• MBBS + MPH / MBA / MHM <b>OR</b> MBA / MPA / MS in
				Project Management and MPH / MHM having 05 years
				of international experience in managing mega projects
				of Health Sector
				Provide insights into healthcare industry trends,
	Healthcare Consultant	()1		medical tourism, and healthcare facility operations
				Provide input on clinical aspects, such as healthcare
				services, equipment, and staffing requirements
2.			04	Responsible for conducting surveys / visits of potential
۷.			04	sites
				Medical Degree holder i.e., MBBS / BDS / D-Pharm /
				Bachelors of Science in Health Informatics / MPH /
				MHM 05 years of international experience in the
				relevant medical field.
				Shall assist with designing the medical city's layout,
				infrastructure, and facilities
3.	Architect	01	04	Responsible for conducting surveys / visits of potential
		•		sites
				Master Degree in Architecture Engineering with 05
				years of international experience in architecture
				Provide input on infrastructure requirements, such as
4.	Engineering	01	04	utilities, transportation, and waste management
	Consultant			Responsible for conducting surveys / visits of potential     sites.
				sites

Sr. No.	Name of Position	No. of positions	Man Months	Description
		•		Master Degree in Civil Engineering with 05 years of
				international experience in consultancy of mega
				infrastructural works
				• Responsible for conducting surveys / visits for site
_	Caalagiat	04	0.4	assessment
5.	Geologist	01	04	Master Degree in Geology with 05 years of
				international experience
				Conduct financial feasibility analysis, including
				revenue projections, cost estimates, and ROI
6.	Financial	01	02	calculations
0.	Analyst	U I	02	CFA / C.A / ACCA with 05 years of international
				experience in financial and economic analysis of mega
				projects of Health Sector
				Conduct market research to identify target audiences,
	Health	mist /	02	demand analysis, and competitive analysis
				Analyze the economic impact of the medical city on the
7.	Economist / Public Policy			growth and development of the region based on
	Expert			economic modeling
				MPhil in Economics + MPH having 05 years of
				international experience of Public Policy making
				Assess potential environmental impacts and ensure
				sustainability
8.	Environmental	01	02	Responsible for conducting surveys / visits of potential
0.	Consultant	01	02	sites
				Master Degree in Environmental Sciences with 05
				years of international experience
				Review the existing legal framework and to suggest
				minimum modifications to ensure that there are no
9.	Legal Expert	01	02	legal obstacles to the execution of proposed project
				and develop model agreements / templates.
				Review and assessment of current and proposed
				legislative arrangements and drafting.

Sr. No.	Name of Position	No. of positions	Man Months	Description
				Complies with federal, state, and local legal
				requirements by studying existing and new legislation;
				anticipating legislation; enforcing adherence to
				requirements; advising management on needed
				actions.
				LLM / LLB or equivalent with 05 years of international
				experience

## 15. Summary of the Project Cost:

(Rs. In Million)

Sr. No.	Description	Cost Before Pre-PDWP	Cost After Pre-PDWP	Difference
1.	Preparation of Feasibility Study (A)	41.250	20.200	(21.050)
2.	16% PST	-	3.232	3.232
3.	Direct Cost (B)	5.630	1.600	(4.030)
	Total Cost	46.880	25.032	(21.848)

# A. Remuneration of Human Resource:

(Rs. In million)

Sr. No.	Designation	No.	Man Months	Rate / Month	Amount
1.	Team Leader	1	05	1.000	5.000
2.	Healthcare Consultant	1	04	0.700	2.800
3.	Architect	1	04	0.700	2.800
4.	Engineering Consultant	1	04	0.700	2.800
5.	Geologist	1	04	0.700	2.800
6.	Financial Analyst	1	02	0.500	1.000
7.	Health Economist / Public Policy Expert	1	02	0.500	1.000
8.	Environmental Consultant	1	02	0.500	1.000
9.	Legal Expert	1	02	0.500	1.000
	Total	9	29	5.800	20.200

# B. Direct Cost:

(Rs. In million)

Sr. No.	Description	Amount
1.	Printing, Photocopies / Stationary (Rs.20,000 per Month)	0.100
2.	Transport / Travelling Expenditures /POL (@ Rs.200,000/- per month) for visits / survey of sites	1.000
3.	Advertisement Cost	0.500
	Total	1.600

# 16. Time Duration of the Feasibility Study: 05 months (01.02.2025 to 30.06.2025)

### PART-B

The PC-II of instant scheme was discussed in the Pre-PDWP meeting held on 28.11.2024 under the Chairmanship of Member (HNP), P&D Board, at a cost of Rs.46.880 million (Rev). In response to the observations / deliberations of Pre-PDWP, the Administrative Department has submitted annotated replies which are as mentioned below:

Sr. No.	Observations of P&D Board	Annotated Replies of SHC&ME Department	Remarks
Obse	rvations of Health Section:		
1	Printed cost in ADP 2024-25 for the instant scheme is Rs.1.00 million whereas Sponsoring Agency has prepared estimates amounting to Rs.27.318 million. The same needs to be justified along with cogent reasons.	Under the instant scheme, SHC&ME Department intends to hire services of an "International" consultant firm for preparation of feasibility study regarding establishment of medical cities across Punjab. The hiring of an "International" consultant firm might not be possible at an estimated / reflected cost of Rs.1.000 million.	Noted
2	Nomenclature of the scheme as per ADP 2024-25 is "Feasibility Study (International) for Establishment of Medical Cities across Punjab" however, nomenclature printed on PC-II is "Hiring of (International) Consultant Firm for preparation of Feasibility Study for the Establishment of Medical Cities across Punjab". Sponsors may rectify the same	Noted and corrected in PC-II.	Noted
3	Sponsors may provide details of deliverables along with timelines in subject TORs.	Deliverable with timelines is given at Page 10 of already submitted PC-II.	Noted
4	No Committee has been proposed to review and approve the deliverables as given in the TORs. Department may clarify.	The consultant selection committee will be notified in the light of PPRA	Noted
5	Lump sum cost of IT Equipment, Office Furnishing, Office Utilities, Janitorial Services, miscellaneous expenses etc. and other items under the heading of "Direct Cost" amounting to Rs.3.630 million have been mentioned but item wise details are not shared. Department may provide item wise details of all items.	Under the instant scheme, IT & office equipment will not be provided by the Department rather it would be arranged by the consultant firm, for which a minimal amount has been proposed in instant PC-II.	Noted
6	Department may justify the need and distribution plan of 12 Nos. Air travel tickets @ Rs.30,000 per ticket.	Air travel would be required for commuting of consultants to and from the potential sites for establishment of medical cities.	Noted
7	Payment schedule has not been defined. Department may clarify it.	The payment schedule will be finalized at the time of contract.	Noted
8	Specific qualification and experience may be indicated against each specialist.	Mentioned at Pages 11 & 12 of already submitted PC-II.	Noted
Obse	rvations of Consultancy Section:		
9	Scope of Consultant may include degree of the existing data related to Health facilities.	Scope of Consultant has been added in the PC-II.	Noted
10	"Identification of potential locations / sites for the establishment of Medical Cities" is the part of scope of work. In view of above, one position of "Geologist" may be added in Consultant Team for conducting surveys for site assessment.	Noted and added in PC-II.	Noted

Sr. No.	Observations of P&D Board	Annotated Replies of SHC&ME Department	Remarks
11	"Pre-qualification of relevant executing agencies" mentioned in "Scope of the Project" is not justified. The same may; be deleted.	Deleted from the scope of the project in the PC-II.	Noted
12	Break-up of cost for preparation of feasibility study (remuneration), being not component of TORs, may be deleted from proposed TORs and mentioned in PC-II.	Deleted from TORs mentioned in the PC-II.	Noted
13	The provision of "Medical Professionals" in the proposed Consultant Team of Subject PC-II is not justified. The same may be deleted. Its assignments/ Job descriptions may be merged with that of "Healthcare Consultant".	Noted and merged in the PC-II.	Noted
14	Scope of the project / consultancy should be well defined.	Scope of the project / consultancy has been explicitly defined / mentioned at Pages 4, 9 & 10 of already submitted PC-II.	Noted
15	Sponsors have proposed to conduct a detailed (International) Feasibility Study initially before proceeding ahead (Page-4). In view of above, Sponsors are required to clarify as to whether to hire complete International Firm as per proposed HR or some specific positions through JV. Further, remuneration of current HR is not compatible to international rates in case of international living.	Department intends to hire services of an international consultant firm as per proposed HR as regards to the observation regarding compatibility of remuneration of proposed HR with the international rates, the same have been raised accordingly in the PC-II.	Noted
16	Job description of all positions do not indicate demand of international specific experience of any proposed position. The same may be provided / clarified.	Updated in the PC-II.	Noted
17	Department should indicate core medical facilities necessarily required in medical city at initial phase.	Provided at Page 3 of PC-II.	Noted
18	Sponsors may, after through market assessment, indicate specific international expertise required for the instant feasibility which are not locally available.	Since the instant project will be the first of its kind in Punjab and will involve huge capital investment. It has, therefore, been decided to involve international experts / consultants having relevant experience establishing Medical Cities.	Noted
19	<ul> <li>The heading "Role of client agency" may be clarified and modified with following;</li> <li>a. Provision of assistance to consultant during the feasibility study as and when required.</li> <li>b. Client will assist to access the record in related department for the completion of assignment.</li> <li>c. To review progress for ensuring achievement of deliverables by the consultants as per timelines mentioned in the agreement.</li> <li>d. To certify by the consultants that all the documents completed under the study will be the property of the client and will not be shared by any firm/ agency.</li> </ul>	Role of client agency has been incorporated in the PC-II.	Noted

Sr. No.	Observations of P&D Board	Annotated Replies of SHC&ME Department	Remarks
	e. Examination and evaluation of reports to be submitted by the Consultant.		
20	Sponsors may review the proposed core team of expert and their education and qualification criteria keeping in view of scope of work.	Reviewed and updated in the PC-II in the light of observations of Consultancy Section of P&D Board.	Noted
21	Professional liabilities of consultants is missing in TORs. PPRA Rules-54 may be followed for the same and make it part of PC-II.	Professional liabilities of consultants have been incorporated in the PC-II.	Noted
22	The heading "Time Duration of proposed Consultancy" may be modified as "time duration of proposed consultancy" is 6 month starting from the award of contract instead of CFY 2024-25.	Rectified in the PC-II.	Noted
23	Advertisement cost has not been mentioned in the PC-II. The same may be made part of the PC-II.	Noted, advertisement cost has been -added in the PC-II.	Noted
24	Sponsors has proposed "R.E Office Rent", it may be replaced with "Office Rent".	Noted, corrected in the PC-II.	Noted
25	"Firms Eligibility Criteria" may be deleted from TORs in the instant PC-II.	Noted	Noted
26	TORs are not well defined. TORs does not cover about Technical requirement such as infrastructural, governance, information system,, Human resource requirements, power/electricity requirements, equipment / tool requirements, wastage disposal mechanism, logistic requirements, procurement planning etc. Sponsors may review the same.	Noted and added in the scope of PC-II	Noted
27	Timelines against deliverables are missing. Same may be incorporated.	Deliverable with timelines are given at Page 10 of PC-II.	Noted
Addi	tional Observations / Comments of Consulta		
28.	TORs are about the feasibility study regarding medical cities whereas proposed TORs lack in working on integration of health care facilities, medical research institutes and related industries such as pharmaceuticals.	Added in TORs.	Noted
29.	Scope of consultants may include the review of legal framework and existing health strategies of Punjab. The situational analysis of the existing health care landscape, density of medical personnel and preparation of estimates for the future demand of medical services based on population projections and expected incidence of diseases.	Added in scope of consultants.	Noted
30.	Scope of consultants may include identification of weaknesses in operations of existing hospitals and include proposals for improvement that need to be addressed in proposed project.	Added in scope of consultants.	Noted

Sr. No.	Observations of P&D Board	Annotated Replies of SHC&ME Department	Remarks
31.	Duplication of qualification and experience requirements with different nomenclature of posts of "Research Analyst" and "Health Economist / Public Policy Expert" has been observed in proposed TORs. Sponsors may provide justification or rectify the same keeping in view the scope of work.	Noted. Post of "Health Economist / Policy Expert" has been retained, whereas, post of "Research Analyst" has been deleted.	Noted
32.	Sponsors may justify / delete the lumpsum provisions proposed for IT Services @ Rs. 500,000/-, Office Rent @ Rs. 500,000/- R.E. Office Furnishing @ Rs. 500,000, Transport / Travelling Expenditures / POL @ Rs. 1,000,000/-	Lumpsum provisions to the extent of IT Services @ Rs. 500,000/-, Office Rent @ Rs. 500,000/-, R.E. Office Furnishing @ Rs. 500,000 and R.E Office Utilities, Janitorial Services @ Rs. 250,000 have been deleted.  However, provision of Transport / Travelling Expenditures / POL @ Rs. 1,000,000/- is essentially required to provide for travelling expenditures for site visits / surveys.	Noted
33.	Sponsors may inform that who will conduct survey / visits of sites? Same may be added in job description of proposed expert.	Following consultants will be responsible for conducting surveys / visits of potential sites: i. Team Leader ii. Healthcare Consultant iii. Architect iv. Engineering Consultant v. Geologist vi. Environmental Consultant	Noted
34.	16% PST may be taken only on remuneration cost and not on the direct cost.	Noted and amended accordingly.	Noted

PC-II of the instant scheme was discussed in detail in the Pre-PDWP meeting held on 28.11.2024. Sr. Chief (Consultancy), P&D Board pointed out that proposed man months for the positions of Team Leader, Research Analyst, Environmental Consultant and Financial Analyst may be reduced / rationalized as per their role in preparation of feasibility study. She also added that data of PC-II may be presented as per its standard format Additional Secretary (Dev.), SHC&ME Department responded that proposed man months for the said positions would be rationalized by reducing them according to their role. Sr Chief (Consultancy), P&D Board pointed out that 16% PST may be taken only on remuneration cost and not on the direct cost. The SHC&ME Department ensured to correct the amount of PST and overall cost of the PC-II.

Resultantly, the total cost of the scheme was reduced from Rs.46.880 million (Revenue) to Rs 25.032 million (Revenue).

#### 17. Recommendation:

The scheme at the cost of **Rs.25.032 million** (Revenue) with gestation period upto 30.06.2025 is placed before PDWP for its consideration.