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Department of Economic Affairs

ADB

PUBLIC PRIVATE PARTNERSHIP IN HEALTH SECTOR

Uttarakhand - A Success Story

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Message

Uttarakhand's participation in the Government of India – Asian Development Bank initiative 'Mainstreaming PPP in the Indian States" has been a rewarding experience. The formation of Uttarakhand PPP Cell with the assistance of experts from ADB has been watershed event for PPP projects in the state.

In the PPP Initiatives of Government of Uttarakhand, the Health sector has benefitted most as Department of Health and Family Welfare, along with Uttarakhand PPP Cell, has conceptualized, developed and awarded nine projects during past three years (2008-2010), out of which five are operational. This has opened the minds to PPP in social sector.

The project models adopted by Uttarakhand do not purport to be full-scale solutions to the entire sector's problems but do provide some useful insights into meeting the challenge of providing equitable, sustainable health services through private participations.

(Manisha Panwar)

Foreword

The Planning Commission of India has estimated an increase in infrastructure spending from 4.1% to 8.5% of the country's gross domestic product (GDP) to sustain growth and poverty alleviation targets. This translates into a $500-billion investment requirement across sectors during 2007–2012. The ability of the public sector to meet the above requirement is constrained by a high public debt that averaged 81.5% of GDP from 2002 to 2008 and rising fiscal deficit. Due to the limited public infrastructure spending, private investments could play a pivotal role in bridging infrastructure investment deficits. The private sector is expected to contribute around 29% of the total requirements for 2007–2012.

Health is the critical sector for achieving overall equitable human development in the country. India's health spending (4.1% of GDP) is much lower than the spending of Organisation for Economic Co-operation and Development (OECD) member countries. The private sector can bridge the investment deficit and improve the efficiency and outreach of service delivery. However, there are some challenging sectoral issues that constrain its ability to enter through Public–Private Partnership (PPP) modalities.

Several constraints exist in the health sector in India. The major challenges for the health sector include accessibility and coverage in rural areas, ineffective management of existing infrastructure, inadequate number and quality of health care professionals. Capacities also need to be strengthened to structure PPPs with local governments, since PPPs and infrastructure-related reforms are still evolving in many states. There is a need for development of model bankable PPP projects to serve as models for replication across the sector.

Discussion of Public-Private Partnerships (PPPs) in the Health Sector is important and timely in light of the challenges the public sector is facing in healthcare finance, management, and provision. Many governments are confronted by fiscal constraints that force them to carefully prioritize and restrict public expenditures. Moreover, many public health systems are already indebted and face further fiscal pressures, such as the need to provide care to increasingly aging populations, improve quality, or invest in often expensive medical treatment and technology advances.

Government of Uttarakhand (GoUk) is promoting PPP as a modality to bridge the investment and efficiency gaps in the State infrastructure so as to provide basic services to its citizens. The Government of Uttarakhand has signed a MoU with Department of Economic Affairs (DEA), Government of India for promotion of PPP in the State. ADB has been leading in the efforts to assist Government of India and Government of Uttarakhand in these efforts through its Mainstreaming PPPs in India programme.

The priority sectors covered by the PPP policy of Uttarakhand include social sectors such as Health and Education, besides Infrastructure development.

A number of PPP models have been conceptualized for use in India in Health Sector. Pilot projects have also been identified and are being structured around these models. GoUk has conceptualized, developed and implemented a number of Health Sector projects in PPP mode in last three years (2008-2011).

These project models do not purport to be a full-scale study of solutions to the entire sector's challenges but hope to provide some useful ideas and suggestions for improving the ability of the health sector in India to provide an equitable quality of life and deliver sustainable services.

Acknowledgement

Under ADB support for Mainstreaming Public-Private Partnerships(PPP) in India, the PPP team (under the joint guidance of ADB and Government of India's PPP focal points) has developed a number of sector initiatives leading to knowledge building and dissemination. This report is an outcome of this activity and constitutes a part of the PPP Knowledge Series emanating from the PPP Initiative in India.

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Preface

Improvement in the health status of population not only contributes directly to human happiness, but also enhances capabilities and freedoms. It is a basic component of human development and hence, an important determinant of well-being of population. Therefore, ensuring universal access to healthcare is necessary for providing health security, particularly to the poor and disadvantaged sections of society. As improved health status enhances productivities and incomes, ensuring access to the poor is critical for inclusive development.

In India, there are formidable challenges in ensuring healthcare services to the needy. Inadequate allocation of public resources and its inequitable spread across different states have resulted in low access and poor quality of public health facilities. In addition, there are severe problems in delivery systems.

Like in many developing countries India intends to increase accessibility of health care for the poor by increasing allocation of resources for public sector and maintaining free care provisions for most services in government clinics and hospitals.

However, in spite of the generous development grants still there exists huge resource gap for the health sector compared with the need.

To address emerging need of health, new forms of action and partnership are needed. There is a clear need to break through traditional boundaries within government sectors, between governmental, nongovernmental organizations, and between the public and private sectors. Due to the existing deficiencies in the public health delivery system, collaborating with private sector and fostering a partnership for providing health services to the underserved sections of the population is the need of the hour.

A number of PPP models have been conceptualized for use in India in Health Sector. Pilot projects have also been identified and are being structured around these models. Government of Uttarakhand (GoUk) has conceptualized, developed and implemented a number of Health Sector projects in PPP mode in last three years (2008-2011).
This report is divided in four chapters:

Chapter 1 covers an overview of health system in India, Contribution of Public and Private Sector in Indian Healthcare Sector, Sources of Financing Health Care, and International Comparison of Health Expenditure.

Chapter 2 covers the definitions of PPP, Why we need PPPs, Common defining elements in definitions of PPP, Essential conditions in the definition, Public Private Partnership Modalities and Trends, PPP Contracts and the Type of Services under Contract.

Chapter 3 covers the Public Private Partnership in Health Sector in India, Objectives of PPP in Health Sector, Review Of PPP in the Health Sector.

Chapter 4 covers the PPP in Health Sector in Uttarakhand, Health Indicators of Uttarakhand, Demographic, Socio-economic and Health profile of Uttarakhand State, The Key Strengths and Weaknesses of Uttarakhand Health Sector, Gaps in Service Delivery, Prevailing Policies, Guidelines and Schemes on PPP in Uttarakhand, Institutional Mechanism, PPP Process for Health Sector and Key learning.

This report is a snapshot of experience and initiative of Government of Uttarakhand in Health Sector service delivery through PPP. These solutions can be replicated and scaled up particularly in Hill States such as North East, Himachal Pradesh and Jammu & Kashmir.

Abbreviations

ADB	Asian Development Bank
DEA	Department of Economic Affairs (India)
PPPs	Public Private Partnerships
GDP	Gross Domestic Product
OECD	Organisation for Economic Co-operation and Development
PFIs	Private Finance Initiatives
LIFTs	Local Improvement Finance Trusts
MH&FW	Ministry of Health and Family Welfare
NGO	Non Government Organisation
PHCs	Primary Health Centers
CHCs	Community Health Centers
VFM	Value for money
VGF	Viability Gap Fund
BOO	Build-Own-Operate
BOT	Build-Operate-Transfer
BOOT	Build, Operate, Own, Transfer
EPC	Engineering Procurement Construction
SPV	Special Purpose Vehicle
ICT	Information and Communications Technology
SRS	Sample Registration System
DoMH&FW	Department of Medical Health and Family Welfare
GoUk	Government of Uttarakhand
UPPPC	Uttarakhand Public Private Partnership Cell
UIPDF	Infrastructure Project Development Fund
EFC	Expenditure Finance Committee
EOI	Expression of Interest
RFP	Request for Proposal
RFQ	Request for Qualification

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Executive Summary

With the rapid growth of the Indian economy in recent times and the changing demographics and socio-economic mix of the Indian population, there has been an immense change to the healthcare requirements in the country. Over the years, the public and private sectors have helped in addressing the health needs of the country and made India's progress on key health indicators like life expectancy and infant mortality.

Today, the healthcare system in India faces a challenge in raising the service quality and ensuring equitable access to people while simultaneously gearing up its capabilities to tackle the changing disease incidence profiles. This challenge needs to be addressed through concerted efforts of both public and private sectors by their agreeing on suitable public policy initiatives which incentivize financing and provision of healthcare, and thereby increase healthcare access to the people. The role of an effective public policy is critical here, since it is the public policy which influences the manner in which a nation's healthcare resources and funds are collected, allocated and utilized as well as the extent to which the services are developed, distributed and accessed.

Primary Health Care and Public–Private Partnerships

India's health spending (about 4.1% of Gross Domestic Product [GDP]) is considered much lower compared with spending in Organisation for Economic Co-operation and Development (OECD) member countries. While India has successfully developed physical infrastructure and adequate coverage of primary health services, significant shortfalls remain. The top three challenges for the health sector are

- accessibility and coverage in rural and remote areas,
- ineffective management of existing infrastructure, and
- inadequate number and quality of health care professionals

Internationally, Public Private Partnerships (PPPs) in the health sector have been focused on addressing large capital expenditure programs, such as hospital Private Finance Initiatives (PFIs) and Local Improvement Finance Trusts (LIFTs) in the United Kingdom (UK). In addition, the Government of the United Kingdom recently introduced an independent sector treatment center that provides a framework for developing diagnostics and surgical capacity to meet the demands of the National Health Service. However, its success in meeting desired outcomes is as yet unconfirmed.

The analysis also considered PPP experience at the state level, e.g., emergency mobile van services, mobile clinics, user-charging diagnostics service centers, facilities outsourcing, ambulance management services and primary health care centers.

A number of PPP models have been conceptualized for use in India in Health Sector. Pilot projects have also been identified and are being structured around these models. GoUk has conceptualized, developed and implemented a number of Health Sector projects in PPP mode in last three years (2008-2011).

The private sector investments in healthcare have been driven by free market economy and the pricing of healthcare services has been largely influenced by investment cost. Consequently, these services have remained out-of-reach of a large majority of our population due to cost consideration. In order to make PPP as a sustainable common ground for both public and private sectors and to evolve successful PPP models, it is essential to have clarity of the public and private sector positions and develop unambiguous criteria for assessing PPP models.

An evaluation framework proposed in this document bring out following key principles on which any PPP model must be assessed:

1) Effectiveness or the ability to meet program objectives
2) Benefit accruals of the program to the poor people at affordable price
3) Achieving and maintaining highest level of service quality
4) Financial Sustainability or financial viability of the model
5) Value-for-Money for the public sector
6) Optimum risk allocation to attract private participation, particularly in remote areas, commensurate with returns

Role of Government

In order to encourage PPP in health sector, the government needs to assume a facilitator's role by way of aiding private sector in service delivery. The government needs to take specific policy initiatives for increasing private sector interest and participation, such as:

1) Support in infrastructure set-up especially land acquisition or providing space
2) Offer capital and/or revenue grant e.g. viability gap funding
3) Budgetary provisions for capital and operating expenses of the PPP
4) Formulate health sector specific policies and guidelines for PPP
5) Capacity building within government for managing PPP projects
6) Ensure transparent and fair bidding process
7) Ensure a non-compete policy within a predefined geographical limit of the PPP facilities
8) Buy-back a share of capacity for government identified beneficiaries

Role of Asian Development Bank

ADB has been assisting the Government of India in mainstreaming PPPs through a number of technical assistance (TA) projects in state, central and project levels. In its TA – Mainstreaming PPPs in Indian States (TA 4890) ADB and deepening capacity building is Mainstreaming PPP (TA 7625) has funded the creation of ADB-PPP Cell in fifteen states and six line ministries with ADB Experts managing these PPP Cells.

In June 2007, the Government of Uttarakhand entered into MoU with Government of India and ADB to participate in ADB-TA, Mainstreaming PPPs in Indian States. Post setting up ADB PPP Cell in Government of Uttarakhand and placement of ADB Experts in May 2008, the PPP Initiatives of Government of Uttarakhand got a momentum. The result was institutionalization of PPPs in the state, capacity building, framing policy guidelines, creation of project pipe line, positive response from private sector and actual project deliveries, with significant number from health sector.

1. Health Sector

1.1 Overview of the Health System in India

1.1.1 The health care system in India consists of public sector, private sector, and an informal network of care providers. The size, scale, and spread of the country hampered complete adherence to the number of well-intended guidelines and regulations. Although there are norms and guidelines, compliance is minimal. In reality, the sector operates in a largely unregulated environment, with minimal controls on what services can be provided, by whom, in what manner, and at what cost. Thus, wide disparities occur in access, cost, levels, and quality of health services provided across the country.

1.1.2 The health sector already has large and vibrant private sector presence - both in formal and informal markets. In some states of India, private sector provision of health care is as high as 70%. The health services markets (to a great extent) have evolved into two distinct streams: private sector provision for those who can afford to pay for health services, and public sector provision for those who have limited means. The private sector provision that caters to the upper end of the market is already based on a self-sustaining revenue mode and is highly commercialized. The public sector provision that caters to the lower end of the market or to the poor has limited scope for revenue generation. This may limit the scope for models based on cross-subsidy.

1.1.3 The Constitution of India divides health-related responsibilities between the central and the state governments. While the national government maintains responsibility for medical research and technical education, state governments shoulder the responsibility for infrastructure, employment, and service delivery. The concurrent list (in the 9th schedule to the Constitution of India) includes issues that concern more than one state, e.g., preventing extension of infectious or contagious diseases among states. While the states have significant autonomy in managing their health systems, the national government exercises significant fiscal control over the states' health systems.

1.1.4 The Ministry of Health and Family Welfare (MH&FW), Government of India oversees the national health system. The MH&FW has four departments - the Department of Health and Family Welfare, the Department of Ayush, Department of Health Research and Department of AIDS Control.

1.1.5 Key concerns in delivery of primary health care in India:

a. Sub centers that typically perform basic medical services, immunizations, and referrals. Sub centers are usually temporary structures that employ 1- 2 care workers in most locations. Concerns include inadequate and/or uneven geographic coverage and inadequate funding.

b. Primary Health Centers (PHCs) typically perform preventive and curative medical services. PHCs are usually small (about 5 beds) with 1–2 qualified doctors, and 14 paramedics and support staff. Each PHC is typically a referral unit for a sub center cluster of about six. Concerns include inadequate and uneven geographic coverage and insufficient number of qualified doctors and staff.

c. Community Health Centers (CHCs) perform advanced medical services, including surgery. Each CHC is a referral unit for a PHC cluster of about 4 PHCs. CHCs has about 30 beds and diagnostic equipment such as X-ray machines. Concerns include inadequate and uneven geographic coverage and equipment personnel mismatch.

1.2 Contribution of Public and Private Sector in Indian Healthcare Sector

1.2.1 The health care system in India pre–dominantly is catered to by the private sector and a minuscule contribution through external flows. Expenditure in the private sector contributes to 78.05% of total health expenditure, public sector accounts for 19.67% and external flows 2.28%. In totality, health expenditure formed 4.25% of Gross Domestic Product (GDP).

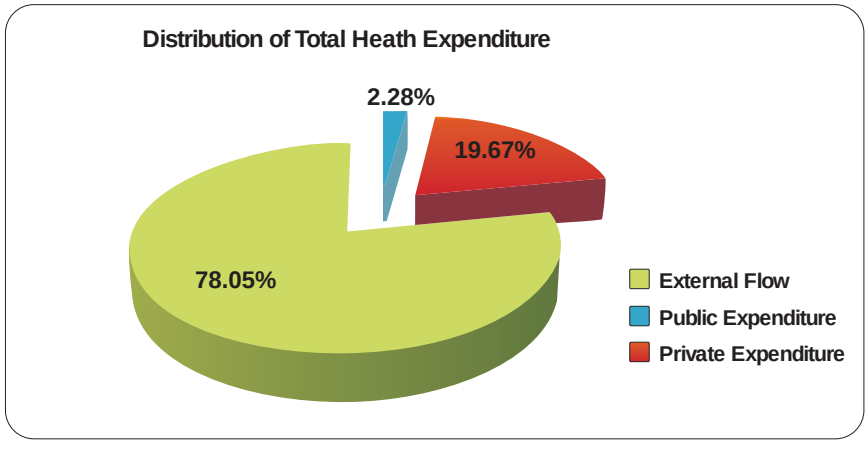
Table 1: Health Expenditure in India 2004-2005

Type of Expenditure	Expenditure (Rs. 000' Crores)	Distribution of total Health Expenditure (%)	Share of GDP (%)
Public Expenditure	26	19.67	0.84
Private Expenditure	104	78.05	3.32
External Flow	3	2.28	0.10
Total Health Expenditure	134	100	4.25
Gross Domestic Product	3,149		

Sources:

1. Demand for Grants of Ministry of Health & Family Welfare & Other Central Ministries,(2006–2007), Government of India
2. Demand for Grants of Departments of Health & Family Welfare & Other Departments, (2006–2007), State Governments

Figure 1: Distribution of Total Health Expenditure in India 2004–05



1.3 *Sources of Financing Health Care*

Table 2 gives the flow of funds into the health sector – Public, Private and flows from external agencies in terms of broad entities.

Table 2: Fund Flow to Health Sector by Source 2004–05

Source of Funds	Expenditure (Rs 000' Crores)	% Distribution
A-Public Funds		
–	9.1	6.78
State Government	16.0	11.97
Local Bodies	1.2	0.92
Total-A	26.3	19.67
B-Private Funds		
Households	95.2	71.13
Social Insurance Funds3	1.5	1.13
Firms	7.7	5.73
NGOs	0.1	0.07
Total-B	104.4	78.05
C-External Flows		
Central Government	2.1	1.56
State Government	0.3	0.24
NGOs	0.6	0.47
Total-C	3.0	2.28
Grand Total	133.8	100.00

By source Central Government accounted for Rs. 90,667 million (6.78%) while State Governments contributed Rs. 160,171 million (12%). Under private expenditure, households contribute a significant portion at 71.13% of total health expenditure with social insurance funds at 1.13% and firms at 5.73%. The total external flow during 2004–05 has been Rs. 30,495 million with a major portion having been routed through the Central Government.

1.4 *International Comparison of Health Expenditure*

Health spending across select countries based on available data shows a mixed picture as given in Table 3

Table 3: Health Spending in Select Countries

Country	Total Health Exp. as a % of GDP		Government Exp. on Health as % of Total Exp. on Health	
	2004	2005	2004	2005
USA	15.4	15.2	44.7	45.1
Germany	10.6	10.7	76.9	76.9
France	10.5	11.2	78.4	79.9
Canada	9.8	9.7	69.8	70.3
UK	8.1	8.2	86.3	87.1
Brazil	8.8	7.9	54.1	44.1
Mexico	6.5	6.4	46.4	45.5
China	4.7	4.7	38.0	38.8
Malaysia	3.8	4.2	58.8	44.8
Indonesia	2.8	2.1	34.2	46.6
Thailand	3.5	3.5	64.7	63.9
Pakistan	2.2	2.1	19.6	17.5
Sri Lanka	4.3	4.1	45.6	46.2
Bangladesh	3.1	2.8	28.1	29.1
Nepal	5.6	5.8	26.3	28.1
India	5.0	5.0	17.3	19.0

Source: World Health Statistics, (2007 & 2008), World Health Organization

In India while both health expenditure as percentage of GDP and public spending as percentage of total health Expenditure are low when compared to developed countries, the scenario is different in comparison to South-east Asian countries. Health Expenditure as percentage of GDP in India is higher than Asian economies – China, Malaysia, Sri Lanka, Thailand, Pakistan and Bangladesh though public spending as percentage of total health expenditure is significantly lower than all these countries except Pakistan.

2.Public Private Partnership (PPP)

2.1.1 Why we need PPPs?

Development of infrastructure and provision of basis civic services has always been considered a very important public sector activity for the following reasons:

a) Governments have recognised the crucial role of infrastructure in fostering economic growth and reducing poverty.
b) Because of its 'public good' and 'essential' nature, Governments have attempted to ensure availability of basic civic services irrespective of market conditions.
c) For a number of economic, social and political reasons, private sector involvement in these important areas was slow to develop and thus uneven.

2.1.2 Provision of public services and infrastructure has traditionally been the exclusive domain of the government. However, with increasing population pressures, urbanization and other developmental trends, government's ability to adequately address the public needs through traditional means has been severally constrained. This has led the Government's across the world to increasingly look at the private sector to supplement public investments and provide public services through Public Private Partnerships.

2.1.3 There is no single definition of Public Private Partnership (PPP). PPP broadly refers to long-term, contractual partnerships between public and private sector agencies, specially targeted towards financing, designing, implementing and operating infrastructure facilities to provide services that were traditionally provided by the public sector.

As per the Viability Gap Fund (VGF) Scheme of Government of India:
"The Public Private Partnership (PPP) Project means a project based on contract or concession agreement between a Government or statutory entity on the one side and a private sector company on the other side, for delivering an infrastructure service on payment of user charges."

As per the Guidelines of IIPDF scheme of, Department of Economic Affairs, Ministry of Finance, Government of India has defined Public Private Partnership (PPP) as:
"Partnership between a public sector entity (Sponsoring authority) and a private sector entity (a legal entity in which 51% or more of equity is with the private partner/s) for the creation and/or management of infrastructure for public purpose for a specified period of time (concession period) on commercial terms and in which the private partner has been procured through a transparent and open procurement system."

2.1.4 Department of Economic Affairs, Ministry of Finance, Government of India has made the provisions of public infrastructure or service,

a) To meet government or social needs
b) With substantial risk transfer from government to the private sector
c) With performance or output based rewards to the private entity

2.1.5 Common defining elements in definitions of PPPs

2.1.6 As per the study conducted by CRISIL on behalf of Department of Economic Affairs, Ministry of Finance, Government of India has brought up Common defining elements in PPP definitions.

a) The primary feature of a PPP is that it is a contract or an arrangement between a government entity and a private entity.

b) Provision of public infrastructure or public services through the private sector, with substantial risk transfer to meet government or social needs, and rewarding / remunerating the private sector based on outputs.

c) The specification whether the private sector will necessarily bring in the private investment has not been specified in majority of the cases.

d) In many countries it is the requirement of service delivery by private sector that drives the question of whether and how much of private investment is required for the project. Hence, the focus is on service delivery to meet public service or infrastructure needs rather than asset creation or investments.

e) None of the definitions have specified that remuneration to private sector or PPP will necessarily be through user charges. In fact in many countries, such as UK, the majority of PFIs are provided payments by the government agencies.

2.1.7 Proposed umbrella definition of PPPs in India

PPP means: an arrangement between a government or statutory entity or government owned entity on one side and a private sector entity on the other, for the provision of public assets and/ or related services for public benefit, through investments being made by and/or management undertaken by the private sector entity for a specified time period, where there is a substantial risk sharing with the private sector, and the private sector receives performance linked payments that conform (or are benchmarked) to specified, pre-determined and measurable performance standards.

2.1.8 Essential conditions in the definition

1. Arrangement with Private Sector Entity: The asset and/or service under an arrangement will be provided by the Private Sector Entity to the public.

2. Public asset or service for public benefit: Has the element of facilities/ services being provided by the Government as a sovereign to its people. To better reflect this intent, two key concepts are elaborated below:

a) 'Public Services' are those services that the State is obligated to provide to its citizens (towards meeting the socio-economic objectives) or where the State has traditionally provided the services to its citizens. For example, provision of security, law and order, electricity, water, etc. to the citizens.

b) 'Public Asset' is that asset the use of which is inextricably linked to the delivery of a Public Service. For example, public road which is linked to public transportation. OR, those assets that utilize or integrate

sovereign assets to deliver Public Services. For example, right of way on highways, shore-land of about 0.5 km abutting the ocean, or use of river / water bodies, etc. Note: Ownership by Government need not necessarily imply that it is a PPP. For example, a captive jetty is not a PPP even though it uses a sovereign asset, while a common user port is a PPP as in the latter case the service is provided for use by public.

3. Investments being made by and/or management undertaken by the private sector entity: It provides for both investment and non-investment PPPs, which is also the international practice. By broad basing the definition, India will gain access to a plethora of PPPs that focus on efficiency to deliver quality services to the public.

4. Operations or management for a specified period: Provides an element of time period after which the arrangement with the private sector entity comes to a closure. Hence, the arrangement is not in perpetuity.

5. Substantial risk sharing with the private sector: It is typically specified to differentiate PPPs from mere outsourcing contracts. For example, a facility service contract is also an outcome based reward contract but not a PPP.

6. Performance linked payments: It is to provide central focus on performance and not merely provision of facility or service. A mere deferred payment contract should not get qualified as a PPP.

7. Conformance to performance standards: It is to provide a strong element of service delivery aspect and the concepts of quality and compliance to pre-determined and measurable standards to be specified by the sponsoring authority.

2.1.9 Exclusionary list

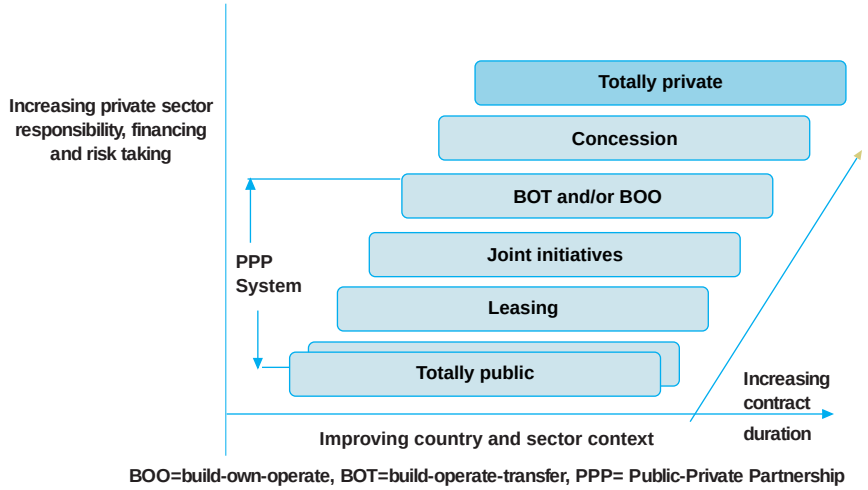
For sake of clarity and common understanding, the following types of arrangements shall not be construed as PPPs:

a) Any Engineering Procurement Construction (EPC) contract, whether payments are deferred or on percentage completion of work or other terms, and where the management or operations and maintenance of the asset is not retained by the private sector after three years from completion of construction;

b) Any arrangement for supply of goods or services for a period of up to three years;

c) Any arrangement or contract that only provides for a hire or rent or lease of an asset without any performance obligations and other essential features of a PPP.

Figure 2: Public Private Partnership Modalities and Trends

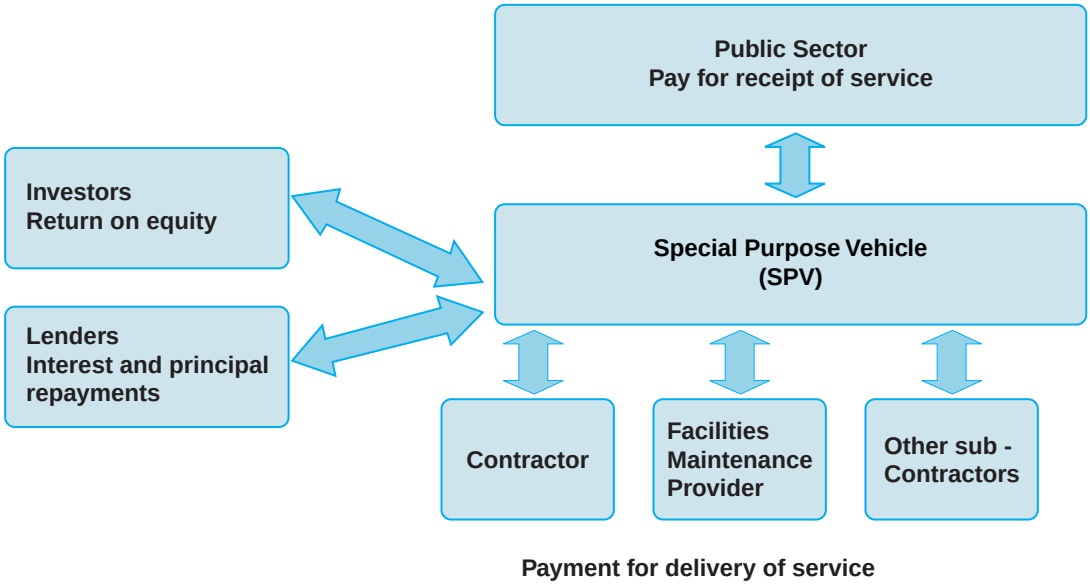


BOO=build-own-operate, BOT=build-operate-transfer, PPP= Public-Private Partnership

Table 4: PPP Contracts and the Type of Services under Contract

Design-Build	The public sector contracts with a single private provider for both design and construction. In this manner, government often can benefit from economies of scale and transfer design-related risk to the private sector.
Design, Build, Operate	The public sector contracts with a private provider to design, build, and operate the capital asset. The public sector remains responsible for raising required capital and retains ownership of the facility.
Design, Build, Finance, Operate	The public sector contracts with a private provider to design, build, finance and operate (DBFO) the capital asset. This model typically involves long- term concession agreements. The public sector has the option to retain ownership of the asset or lease the asset to the private sector for a period of time.
Design, Build, Own, Operate	A private partner assumes responsibility for all aspects of the project. The ownership of the new facility is transferred to the private provider, either indefinitely or for a fixed period of time. This type of arrangements also falls within the domain of a private finance initiative. This arrangement is also known as "build, operate, own, transfer" or BOOT.

Figure 3: Simplified Public-Private Partnership Structure



3. Public Private Partnership in Health Sector in India

3.1 Public Private Partnership in Health

3.1.1 Public-Private Partnership or PPP in the context of the health sector is an instrument for improving the health of the population. PPP is to be seen in the context of viewing the whole medical sector as a national asset with health promotion as goal of all health providers, private or public. The Private and Non-profit sectors are also very much accountable to overall health systems and services of the country. Therefore, synergies where all the stakeholders feel they are part of the system and do everything possible to strengthen national policies and programmes needs to be emphasized with a proactive role from the Government.

3.1.2 In states and regions where health staffing is weak, the private sector's presence to deliver primary health care will also be very weak. Hence, addressing human resource shortages in states like Uttarakhand, Himachal Pradesh and other such States would be critical for ensuring scalable and sustainable PPPs.

3.1.3 Where public sector primary health care center (PHC) provision is perceived as of poor quality, people tend to bypass public PHCs and instead seek care from formal and informal private health providers. Poor supervision, politicization of personnel, unionism, lack of appropriate skills, and shortage of personnel are some of the reasons for a less-effective public sector. Many of these factors add additional risks to social sector PPPs, which are risks not observed in hard infrastructure.

3.1.4 The public sector is generally seen to be less effective in demanding situations such as the provision of care in remote and backward areas, reaching the poor, and serving handicapped clients. The PPP models could offer more effective ways to reach these hard-to-reach population subgroups.

3.1.5 The integration of Information and Communications Technology (ICT) for improving health service provision is of different scale in different states. For example, in Uttarakhand, Andhra Pradesh, ICT has been effectively used to improve emergency ambulance services, catastrophic health insurance, and help lines. This is possible as there are ICT firms willing to do social work as part of their corporate social responsibility, and a government willing to seek new collaborations and try new innovations. The gap between advanced states and less-advanced states, and between rural and urban areas, in the use of ICT to enhance social service provision can be bridged and accelerated by PPPs.

3.1.6 PPP however would not mean privatization of the health sector. Partnership is not meant to be a substitution for lesser provisioning of government resources nor an abdication of Government responsibility but as a tool for augmenting the public health system.

An overview of both public and private expenditure in some States has been presented in Table 5.

Table 5: Public and Private Expenditure in Health by States 2004–05

	Expenditure (Rs 000' Crores)		Expenditure (Rs.)			Percentage	
	Public Expenditure	Private Expenditure	Total Expenditure	Per Capita Public	Per Capita Private	Public Exp. as Share of GSDP	Public Exp. as Share of State Expenditure
Andhra Pradesh	1.5	6.9	8.4	191	870	0.72	3.22
Assam	0.5	1.7	2.2	162	612	0.86	3.08
Bihar	0.8	3.7	4.6	93	420	1.12	4.12
Gujarat	1.1	4.1	5.1	198	755	0.57	3.06
Himachal Pradesh	0.4	0.6	1.0	630	881	1.74	4.98
Kerala	0.9	8.8	9.7	287	2663	0.88	4.65
Madhya Pradesh	0.9	4.2	5.1	145	644	0.87	3.19
Maharashtra	2.1	10.3	12.4	204	1008	0.55	2.88
Orissa	0.7	2.8	3.5	183	719	0.98	4.41
Punjab	0.6	2.8	3.5	247	1112	0.65	3.01
Rajasthan	1.1	3.5	4.6	186	575	0.98	3.9
Tamil Nadu	1.4	6.7	8.1	223	1033	0.71	3.43
Uttar Pradesh	2.3	15.1	17.4	128	846	0.92	3.86
Arunachal Pradesh	0.1	0.1	0.2	328	1158	1.32	3.68
Uttarakhand	0.3	0.5	0.7	280	538	1.11	3.96
Andhra Pradesh	1.5	6.9	8.4	191	870	0.72	3.22

Source:

1. Demand for Grants of Health & Family Welfare Department & other Departments, (2006–07), State Governments
2. State Finances A Study of Budgets, (2006–07), Reserve Bank of India

3.1.1 The per capita health expenditure for India in 2004–05 was Rs. 1,201 of which the share of public was Rs. 242 (20.18%) and that of private was Rs. 959 (79.82%). Public expenditure as a share of Gross State Domestic Product (GSDP) was less than 1% for all the major states except Bihar where this was 1.12%. Further as a share of total state expenditure, public expenditure varied within a range of 3 to 4% for all the major states except Maharashtra where it was 2.88%.

3.1.2 Given the overwhelming presence of private sector in health, there is a need to regulate and involve the private sector in an appropriate public-private mix for providing comprehensive and universal primary health care to all. However there is an overwhelming need for action on privatization of health services, so that the health care does not become a commodity for buying and selling in the market but remains a public good, which is so very important for India where 1/3 of the population can hardly access amenities of life, leave alone health care.

3.1.3 In view of the non-availability of quality care at a reasonable cost from the private sector , the up scaling of non-profit sector in health care both Primary, Secondary and Tertiary care, particularly with the growing problems of chronic diseases and diseases like HIV/AIDS, needs long term care and support.

3.2 Objectives of PPP in Health Sector

Universal coverage and equity for primary health care should be the main objective of any PPP mechanism besides:

a. Improving quality, accessibility, availability, acceptability and efficiency

b. Exchange of skills and expertise between the public and private sector

c. Mobilization of additional resources.

d. Improve the efficiency in allocation of resources and additional resource generation

e. Strengthening the existing health system by improving the management of health within the government infrastructure

f. Widening the range of services and number of services providers.

g. Optimum risk allocation to attract private participation commensurate with returns

h. Community ownership

3.3 Review Of PPP In The Health Sector

During the last few years, the Centre as well as the State Governments has initiated a wide variety of public-private partnership arrangements to meet the growing health care needs of the population. The potential public-private partnership models in Health Care are:

Table 6: Potential Public–Private Partnership Models: Health Care

Models	Key Features and Issues
Primary Healthcare Center Adoption, Management Contracts, Mobile Clinics, and Emergency mobile services	• Addresses the need for improving primary health care access in rural areas. • Focuses on taking over existing infrastructure and introducing private sector management techniques. • Limited by the overall scarcity of health care professionals in the country.
Build, Own, and Operate Diagnostic Centers	• Addresses the need for creating additional diagnostics services. • Requires the private sector to install, maintain, and operate diagnostics services. • Has potential for user charging based on political appetite. • Needs a referral system with network of doctors and health centers.
Specialty and Super Specialty Hospitals	• Addresses the need for improving and developing hospital infrastructure. • Focuses on hard infrastructure and facilities management of the hospital (no health provision seen). • Affordability is a key consideration. • Requires wider stakeholder consultation. • Needs to develop public sector capability on procurement of a large private finance initiative project.

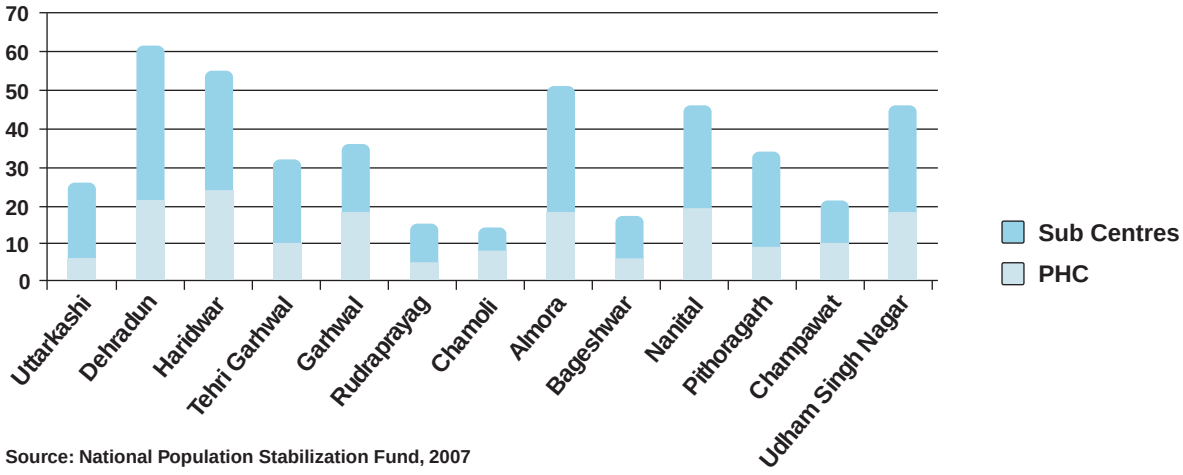
Source: KPMG report: Improving Health and Education Service Delivery in India through PPP
PPP Knowledge Series under the ADB-Government of India PPP Initiative

4. PPP in Health Sector: Uttarakhand

4.1 *Health Indicators of Uttarakhand*

4.1.1 At present, in Uttarakhand, there is a lack of specialized facilities in the government hospitals, Primary Health Centres and Community Health Centers.

Figure 4:The health facilities (2006-07) in all the Districts of Uttarakhand



Source: National Population Stabilization Fund, 2007

4.2 *Demographic, Socio-economic and Health profile of Uttarakhand State*

The Infant Mortality Rate is 41 (SRS 2009) and Maternal Mortality Ratio is 440 (SRS 2004 - 06) (per 100,000 live births) which are higher than the National average. The Sex Ratio in the State is 962 females per 1000 males. Comparative figures of major health and demographic indicators are as follows:

Table 7: Demographic, Socio-economic and Health profile of Uttarakhand State as compared to India figures, 2011

S. No.	Item	Uttarakhand	India
1.	Total population (Census 2011) (in millions)	10	1210
2.	Decadal Growth (Census 2011) (%)	NA **	17.64
3.	Birth Rate (SRS 2009) (%)	19.7	22.5
4.	Death Rate (SRS 2009) (%)	6.5	7.3
5.	Natural Growth Rate (SRS 2009) (%)	13.2	15.2
6.	Infant Mortality Rate (SRS 2009) (%)	41	50
7.	Sex Ratio (Census 2011) females per 1000 male	963	940
8.	Total Literacy Rate (Census 2011) (%)	79.63	74.04

** The State of Uttarakhand was formed in November 2000.

Table 8: Health Infrastructure of Uttarakhand, 2008

Particulars	Required	In position	Shortfall
Sub-centre	1,294	1,765	-
Primary Health Centre	214	239	-
Community Health Centre	53	55	-
Health Worker (Male) MPW(M) at Sub Centres	1,765	616	1,149
Health Assistant (Female)/LHV at PHCs	239	340	-
Health Assistant (Male) at PHCs	239	417	-
Doctor at PHCs	239	866	-
Obstetricians & Gynecologists at CHCs	55	30	25
Physicians at CHCs	55	4	51
Pediatricians at CHCs	55	18	37
Total specialists at CHCs	220	67	153
Radiographers	55	30	25
Pharmacist	294	294	0
Laboratory Technicians	294	132	162
Nurse/Midwife	624	292	332

(Source: RHS Bulletin, March 2008, M/O Health & F.W., GOI)

Table 9: The other Health Institution in the State

Health Institution	Number
Medical College	4
District Hospital	18
Ayurvedic Hospital	7
Ayurvedic Dispensary	467
Unani Hospital	2
Unani Dispensary	3
Homeopathic Hospital	1
Homeopathic Dispensary	60

4.3 The Key Strengths and Weaknesses of Uttarakhand Health Sector

4.3.1 Strengths

The following are key strengths of Uttarakhand Health Sector:

- Reasonable status of physical infrastructure, i.e. adequate number of sub centers and PHCs, slight shortfall in CHCs.
- A significant proportion of PHCs have toilets, water, and electricity. The details are provided in Table 8.

4.3.2 Weaknesses

The following are key weaknesses of Uttarakhand Health Sector:

- Shortage of skilled health professionals and urban concentration of health professionals in major urban centres like Dehradun, Haldwani etc.
- Service delivery issues - Overall ineffective management of services.
- Inadequate rural accessibility.

4.3.3 Gaps in Service Delivery

- At present, in Uttarakhand, there is a lack of specialized facilities/skilled manpower in the government hospitals, Primary Health Centres and Community Health Centers.
- Health care primarily consists of two stages a) diagnosis and b) Curative. Hill states like Uttarakhand suffer on both the accounts as the tertiary level of diagnostic facilities and specialized doctors to provide post diagnosis consultation are mostly available in foothills and plain areas.
- The diagnosis phase is hampered by lack of diagnostic facilities or the lack of professionals to run the current diagnostic facilities in the government hospitals.
- As a result the patients come to plain area, Dehradun in particular, to get both diagnostic and post diagnosis service. This is putting a tremendous load on the hospitals in plain area.
- Currently there is a shortage of medical professionals in the State. As a result, Department of Medical Health and Family Welfare, Uttarakhand is unable to acquire and fully staff their existing Medical facilities.

4.4 PPP in Health Sector in Uttarakhand

4.4.1 In order to bridge the above cited gaps in service delivery, the Government of Uttarakhand has adopted PPP as one of the modes to meet the growing need for health services in the State.

4.4.2 The State has initiated a number of Health projects with private sector participation with most of these are in the form of NGO participation. The state has outsourced the non clinical services – laundry, sanitation, diet and waste management to private agencies through bidding process.

4.4.3 Government of Uttarakhand initiated and created a pipeline of Projects (all sectors) since last three years (2008-2011).

Table 10: Number of PPP Projects in Pipe line (all sectors) as on 31st September 2011

Pipeline of PPP Projects (all sectors including health)	92
Projects Operational	7
Under Implementation	41
Bid Complete	28
Under Bidding	6
Concept Stage	10

4.4.4 Public-Private Partnership (PPP) has emerged as one of the important strategies for health sector reforms in Uttarakhand. Initiatives have been taken by Department of Medical Health and Family Welfare (DoMH&FW), Government of Uttarakhand to undertake different PPPs for meeting growing need for health services in the State.

4.5 ADB Initiatives in Uttarakhand

4.5.1 ADB has been assisting the Government of India in mainstreaming PPPs through a number of technical assistance (TA) projects in state, central and project levels. Uttarakhand is one of the states where ADB has funded the creation of ADB-PPP Cell and placing ADB Experts to manage the Cell.

4.5.2 After setting up ADB PPP Cell in Government of Uttarakhand and placement of ADB Experts in May 2008, the PPP Initiatives of Government of Uttarakhand got a momentum. The result was institutionalization of PPPs in the state, capacity building, framing policy guidelines, creation of project pipe line, positive response from private sector and actual project deliveries, with significant number from health sector.

4.5.3 Within three years' of creation of ADB PPP Cell, a pipeline of health sector projects, among other sectors, was formed and a number of successful bidding was completed. The detail of health sector projects in Uttarakhand is shown in Table 12.

4.5.4 Uttarakhand PPP Cell (UPPPC) is managed by Experts of Asian Development Bank - Sumit Barua as PPP Expert and Krishan Rautela as MIS Expert. The UPPPC Technical staff consists of Kokila Tayal as PPP Associate and Neha Verma as PPP Intern.

Table 11: Sector wise total number of PPP projects in Uttarakhand as on 31st September 2011.

Sector	Total	Operational	Agreement Signed: Under Cosnt	Bid Process Complete	Under Bidding	Concept Stage
Tourism	7	0	0	0	4	3
Transport	3	0	0	0	2	1
Agriculture	9	0	0	0	3	6
Social	26	4	3	0	5	14
Roads	1	0	0	1	0	0
Urban	5	1	0	2	0	2
Energy	2	0	0	0	0	2
Total Numbers	92	7	6	10	28	41
Value (Rs. Cr)	5,484	167	367	849	1,316	2,786

Table 12: The total number of projects in Health Sector as on May 2011.

DIAGNOSTIC			
S.No	Project	Current Status	Location
1	MRI Machine	Operational	Dehradun
2	Specialized Diagnostic Centre Offering Services in Radiology, Pathology and Non-Invasive Cardiology	Under Bidding	Kotdwar, Pauri
3	Specialized Diagnostic Centre Offering Services in Radiology, Pathology and Non-Invasive Cardiology	Under Bidding	Pithoragarh
PREVENTIVE & CURATIVE			
4	Nephrology Centre, Dehradun	Operational	Dehradun
5	Nephrology Centre, Haldwani	Under Implementation	Haldwani, Nainital
6	Thirteen (13) Mobile Hospital Vans (MHVs)	Operational	One in each district.
7	Thirteen (13) Mobile Medical Unit under NRHM	Operational	One in each district.
8	108 Emergency Response Services	Operational	All districts.
SUPER SPECIALTY			
9	Cardiac Centre	Under Implementation	Dehradun
10	Oncology Centre	Under Implementation	Dolwala, Dehradun
AYURVEDIC AND MEDICAL TOURISM			
11	AYUSH Gram	Under Implementation	Bhawali, Nainital

Out of the above Eleven (11) Projects, services of a Transactional Advisor were taken for projects 2 and 3 only. The project preparation, bid process management and project management for all other projects were performed by Uttarakhand PPP Cell (UPPPC).

4.6 Policies, Guidelines and Schemes for PPP in Uttarakhand

4.6.1 Currently the PPP procurement process in Uttarakhand is guided by Chapter 6 of Uttarakhand Procurement rules 2008.

4.6.2 The Government of Uttarakhand is deliberating on a draft PPP Policy prepared by PPP Cell. The policy objectives are to create conducive environment for PPP in the state with emphasis on creating a shelve of PPP projects, value-for-money analysis, risk sharing framework, transparent bidding process, institutional mechanism for appraisal/ approval/monitoring and regulatory framework.

4.6.3 The Government of Uttarakhand has floated a State Viability Gap (UVGF) funding scheme with special emphasis for development of PPP Projects in hill areas. The UVGF also includes social sector apart from all other priority sectors.

4.6.4 The Government of Uttarakhand is deliberating on a draft Infrastructure Project Development Fund (UIPDF) to fund project development activities by administrative departments.

4.6.5 The PPP Cell has prepared a Handbook of Developing PPP Projects, which has been widely circulated and referred by administrative departments in developing PPP projects.

4.7 Institutional Mechanism

4.7.1 The Government of Uttarakhand (GoUk) has signed a MoU with Department of Economic Affairs (DEA), Government of India for promotion of PPP in the State.

4.7.2 A Government Order was issued on February 12, 2007 to form PPP Cell in Department of Planning with Secretary (Planning) as PPP Nodal Officer.

4.7.3 The Expenditure Finance Committee (EFC) of Government of Uttarakhand appraises and approves all PPP projects with Project cost over Rs 5.00 Crores.

4.7.4 The Government of Uttarakhand constitutes Expert Committee and Project Monitoring Committee on project-to-project basis for effective project monitoring and assessment.

4.7.5 Department of Medical Health & Family Welfare, GoUk has constituted the Departmental PPP Cell headed by Director level medical professional.

4.7.6 Departmental PPP Cell of Medical Health & Family Welfare is responsible for initiating a PPP project, collect & validate technical data, coordinate with Uttarakhand PPP Cell (UPPPC) and actively participate in PPP project development process.

4.7.7 The Government of Uttarakhand formed Uttarakhand PPP Cell (UPPPC) as a registered society in June 2008.

The UPPPC identifies, conceptualizes and creates shelf of projects, and bid process management in consultation with the owner department/agency.

4.7.8 The UPPPC sets out the process for scrutinizing and clearing all PPP proposals, frame guidelines for assessing the feasibility of private investment, set in place standard procurement documents and framework agreements and assist the State Government in the procurement of developers.

4.7.9 The UPPPC acts as a Technical Secretariat to the EFC and would act as Technical Secretariat to the Empowered Committee on Infrastructure (ECI) as proposed in the PPP Policy.

4.8 Typical PPP Process followed in Department of Health

4.8.1 Project Preparation:

- Project Identification
- Preparation of Concept note
- Approval from concern Departments/Authorities
- Engaging TAs, if needed
- Private Sector Discussions
- Public Sector Comparator
- Value for Money Analysis
- Selecting PPP Structure and PPP Model
- Bidding Criteria identification

4.8.2 Market Engagement:

- Approvals if needed
- Issue Expression-Of-Interest/Request-for-Qualification documents
- Evaluation and Short listing
- Approvals, wherever needed
- Issue Request-for-Proposal & Draft Concession Agreement
- Pre-bid Conference
- Evaluation of Bids
- Selection of Preferred Bidder

4.8.3 Contract Management

- Approval, wherever needed
- Contract signing
- Project site Handover to Private Sector Partner
- Project Monitoring
- Service levels monitoring
- Hand back process
- Renewal / Rebid

4.9 Key Lessons from PPP initiatives of health Sector in Uttarakhand

4.9.1 Project Rationale: The project for diagnostic, curative, super specialty services may be initiated in synergy with service delivery requirements and current level of "gaps". The initial consultation process with medical fraternity such as Chief Medical Superintendent of District Hospital, Chief Medical Officer and their team is advisable to finalise type and scale of proposed service and to estimate target beneficiary.

4.9.2 Challenge in Remote and Hill areas: Attracting Private sector in remote and hill areas for health sector service delivery is a challenge. Reputed hospital and other medical service brands are less willing to participate due to perceived operation and management risk. The project structure, including risk sharing framework, needs to be attractively designed for wide private sector participation.

4.9.3 Medical Professionals: The stringent qualification/ experience of medical and technical professionals indicated in Project Information Memorandum of previously completed projects have been found to be deterrent for Private Participation, particularly in remote areas. Due to lack of other infrastructures in remote areas, it is difficult - for private and government sector both, to recruit and retain trained specialists and super specialists. This aspect may be considered during designing the project. The integration of Information and Communication Technology based services such as teleradiology, telemedicine etc could be seen as options without compromising service quality.

4.9.4 Value-for-Money Analysis: Since most of BOT type's project in health sector would be grant based due to regulated user charges, a detailed Public Sector Comparator and VfM analysis may be carried out for rationale behind PPP option. This exercise is not so easy and the actual bid received vis-à-vis shadow bid could sometimes come as a surprise. The Private sector consultation and exchange of data/information is necessary beforehand to build a reliable VfM. The detailed bill-of-quantity level costing is necessary to estimate reliable capital and operations costs.

4.9.5 Demand Risk: In Uttarakhand most of the health PPP are structured around payment to PPP partner based actual services delivered – quantity and quality. The demand risk in these cases has been completely passed on to the PPP partner. However to minimise the demand risk for PPP partner, it is advisable to provide referrals from all government hospital, in the catchment area, to the facility. This may be fixed as a mandatory condition for Government and relevant Government Orders may be issued to concerned hospitals in the interest of project sustainability.

4.9.6 Technological Obsolescence: Due to faster technology obsolescence in medical field, the concession period need to be decided accordingly. The cost of hardware/software updates during the concession period need to be built-in.

4.9.7 User Charges: The majority of beneficiaries of medical PPP project are poor patient and the project may be designed solely based on regulated user charges (benchmarked on AIIMS, CGHS or any other level). Alternately, the project could have a mix user charges - regulated and market driven, for patients who are willing and able to pay market price.

4.9.8 **Policy level initiatives: The government needs to create conducive PPP environment for attracting Private participation by way of following initiatives:**

- **Support in infrastructure set-up like land acquisition or providing space**
- **Offer capital and/or revenue grant e.g. viability gap funding**
- **Budgetary provisions for capital and operating expense of the PPP**
- **Formulate health sector specific policies and guidelines for PPP**
- **Capacity building within government for managing PPP projects**
- **Ensure transparent and fair bidding process**
- **Buy-back a share of capacity for government identified beneficiaries**

Operations and Management of MRI Machine at Doon Hospital, Dehradun

Project Brief

A Magnetic Resonance Imaging (MRI) machine was procured by the Government of Uttarakhand in December 2007 and installed at Doon Hospital, Dehradun. This machine is one of the latest models-1.5 tesla-Phillips with advanced features.

After reviewing the requirement of specialized medical team and complexity to manage the unit, the government decided to offer the Operation & Maintenance (O&M) of the machine through PPP mode.

PPP Structuring	
PPP Model	Operation and Maintenance (O&M)
Concession Period	Five (5) years
Concession	a) Right to operate 1.5 Tesla MRI machine b) Space in Doon Hospital c) Part Revenue through user charges in second shift d) Referral cases from all government hospitals.
Government Support	a) The MRI machine b) AMC contract for 5 years.
Benefits to Government	a) Maximizing service availability b) Reduction of O&M Cost c) Transfer of Risk of Operations to PPP partner

Description of Activities	
Operation & Maintenance	a) To Operate the MRI machine and conduct MRI procedures b) To record and maintain patient data in the Information System c) To ensure minimum 98% machine uptime d) To keep the facility open for patients from 8.00 AM to 8 P.M. e) To respond to emergency cases during odd hours also f) To provide reports to sponsoring department periodically g) To coordinate with manufacturer for corrective & preventive maintenance
User Charges	a) To collect user charges as per AIIMS stipulated rate
Revenue	a) In each shift (8.00 AM - 2.00 PM & 2.00 PM - 8.00 PM) Twelve (12) procedures could be performed. An estimated 7,200 cases /yr are the deliverable of this project at 100% capacity.

Project Cost			
S No	Description	Rs Crores	Source
1.	Capital Cost	6.78	Government
2.	Present value of O&M (5 yrs period)	1.75	PPP partner

Milestones of the Project and time schedule	
Milestone	
Expression of Interest (EoI) released	14th May 2008
Request for Proposal (RFP) released	23rd Dec 2008
Concession Agreement signed with M/s Mahajan Imaging Pvt Ltd.	8th June 2009
Commencement of operation	6th July 2009

Bid Process

Eight (8) bidders responded to the RFP document. Three (3) qualified. Mahajan Imaging offered the highest revenue share (34%) and was selected.

Project Performance

The project is running successfully at Doon Hospital, Dehradun. The number of BPL patients availing the services is increasing.

Total number of patients availing the services of MRI Machine from July 2009 - May 2011 is below:

Years	Total Cases	Non Paying Cases	Paying Cases	Breakdown Days
July 09 - May 11 (25 Months)	7,819	2,773	3,925	16

Problems / bottlenecks in implementation / taking up the project:

At the time of estimating the operational costs, a few elements could not be taken into account by the Department of Health and Family Welfare. It was mentioned in the Draft Concession Agreement that the concessionaire would pay for all the utilities – power etc as per actual, based on a separate meter.

After the bid, it was realised that the helium unit of the machine needs continuous power to maintain helium temperature. The concessionaire was not agreeing to pay for such power consumption during the idle time. However the concessionaire had to finally agree to bear the cost of idle power, since this issue had not been raised before submitting the bid.

The costs must be estimated at a very minute level before finalising project documentation to avoid any disputes or windfall profits to any of the partners.

Role of PPP Cell

The project was initiated at Directorate General of Medical Health and Family Welfare (DOMHFW), Government of Uttarakhand and was forwarded to PPP Cell at the stage of finalizing of RFP. The PPP Cell's role in the project was as under:

- Project Conceptualisation
- Financial/Business model
- Project Structuring
- Preparation of EOI
- Preparation of RFP/CA
- Interaction with Private Sector
- Facilitating Government approvals, including EFC
- Bid Evaluation and finalizing on selection of PPP Partner
- Post implementation monitoring

Case Studies - PPP Projects in Health Sector in Uttarakhand - Diagnostic Centres

A Pilot Project to set up two diagnostic centers on DBFOT Mode at:

- **District Hospital, Pithoragarh and**
- **District Hospital, Kotdwar, Pauri**

Project Introduction

Health care primarily consists of two stages a) diagnosis and b) treatment. Hill states like Uttarakhand suffer on both the accounts as the tertiary level of diagnostic facilities and specialized doctors to provide post diagnosis consultation are mostly available in foothills and plain areas.

The diagnosis phase is hampered by lack of diagnostic facilities or the lack of professionals to run the current diagnostic facilities in the government hospitals.

As a result the patients come to plain area, Dehradun in particular, to get both diagnostic and post diagnosis service. This is putting a tremendous load on the hospitals in plain area.

Base on this need, as pilot project, it is proposed to set up two Diagnostic Centers in District Hospital, Pithoragarh and District Hospital, Kotdwar, Pauri.

KPMG was selected as Transaction Advisor to carry out Project Development Services under PPP mode for the aforesaid projects.

The proposed project development is funded under India Infrastructure Project Development Fund (IIPDF) scheme of Government of India, 75% and 25% of total project development cost is funded by GoI and Asian Development Bank (ADB), Department of Economic Affairs, Ministry of Finance (DEA) respectively.

PPP structuring	
PPP Model	Design-Build-Finance-Operate-Transfer (DBFOT)
Concession Period	15 years
Concession	a) Space provided in the existing District hospitals b) Referral cases from all government hospitals
Government Support	a) Viability gap Fund (VGF)
Benefit to Government	a) Maximizing service availability b) Reduction of O&M Cost c) Free service to BPL patients d) Transfer of Risk of Operations to PPP partner
Description of Activities	
Operation & Maintenance	a) To procure, install & operate diagnostic equipments b) To maintain and upgrade the existing machines c) To perform all the diagnostic procedures d) To recruit, manage and trained medical & non-medical staff for the centers e) To install a separate software for maintaining patient database f) To ensure a minimum agreed up-time of the facilities g) To respond to emergency cases during odd hours also
User Charges	a) To collect user charges as per AIIMS/CGHS stipulated rates b) To serve BPL patients free of cost c) To collect Revenue from alternate sources (like selling insurance policies, medicines, providing services of expert through telemedicine etc.)

<table>
<tr><th colspan="5">Project Cost</th></tr>
<tr><td>S No</td><td>Description</td><td colspan="2">Rs Crores</td><td>Source</td></tr>
<tr><td>1.</td><td>Capital cost for both diagnostic centers</td><td colspan="2">16.00</td><td>PPP partner</td></tr>
<tr><td rowspan="2">2.</td><td rowspan="2">Maximum VGF amount
(the amount of VGF payable is the bidding criteria)</td><td>Diagnostic Centre, Kotdwar</td><td>2.749</td><td rowspan="2">Government</td></tr>
<tr><td>Diagnostic Centre, Pithoragarh</td><td>4.165</td></tr>
<tr><th colspan="5">Milestones of the Project and time schedule</th></tr>
<tr><td colspan="2">Milestone</td><td colspan="3">Scheduled date</td></tr>
<tr><td colspan="2">Request for Qualification (RFQ) released</td><td colspan="3">25th Oct 2010</td></tr>
<tr><td colspan="2">Application Due Date</td><td colspan="3">22nd Nov 2010</td></tr>
<tr><td colspan="2">Request for Proposal (RFP) released</td><td colspan="3">8th April 2011</td></tr>
<tr><td colspan="2">Bid Due Date</td><td colspan="3">11th April 2011</td></tr>
<tr><td colspan="5">A total of five (5) bids received in RFQ stage. Out of five (5) applicants Four (4) were shortlisted viz: 1) Mahajan Imaging Pvt. Ltd. 2) Heritage Hospitals Ltd. 3) Ganesh Hospitals 4) Metropolis Healthcare Ltd.
No Financial bid was received.
The Projects being restructured and to be re-bid.</td></tr>
<tr><th colspan="5">Role of PPP Cell</th></tr>
<tr><td colspan="5">The project is initiated by the Directorate General of Medical Health and Family Welfare (DoMHFW), Government of Uttarakhand (GoUk).

The PPP Cell's role in the project was as under:

• Project Conceptualisation
• Facilitating Government approvals including EFC
• Application for IIPDF-interaction with ADB and GoI
• Appraisal of reports submitted by Transaction Advisor
• Site Visit with TA and Stakeholder Consultation
• Interaction with Transaction Advisor in finalizing Bid Document
• Bid Process Management
• Bid Evaluation</td></tr>
</table>

Case Studies – PPP Projects in Health Sector in Uttarakhand - Nephrology Centers

Build -Operate-Transfer of Nephrology Centres at:

- **Coronation Hospital, Dehradun and**
- **Base Hospital, Haldwani**

Project Brief

There are number of patients who require dialysis treatment on regular basis. The number of dialysis machines is inadequate in government hospitals. There is always a long waiting status for the patients in government hospitals. The dialysis procedure in private hospitals is very costly and is difficult for poor patients to continue treatment in private hospitals.

It was felt that a fully equipped Nephrology Centres be created in Dehradun and Haldwani to meet the demand of patients requiring dialysis procedure continuously.

PPP Structuring	
PPP Model	Built Operate & Maintain (BOT) Model
Concession Period	Five (5) years
Concession	a) Space measuring 480 sq meters at Coronation Hospital. b) Space measuring 550 sq meters at Base Hospital, Haldwani
Government Support	a) The government support as per bid outcome. b) State government shall hand over existing furniture & fixture.
Benefits to Government	a) Maximizing service availability b) Reduction of O&M Cost c) Free service to BPL patients d) Transfer of Operational Risk to PPP partner e) Extended hours of operation compared to government setup

Description of Activities:	
	a) To procure and run thirteen (13) dialysis machines and other equipments in each location b) To furnish the given space
Operation	a) To keep the facility open for patients from 8.00 AM to 6 P.M. (Min) b) To respond to emergency cases during odd hours also. c) To dedicate one separate machine each for patients infected with HIV, hepatitis-B and hepatitis-C. d) To recruit the required personnel including Nephrologists, Technicians, nurses, ward boys and other support staff. e) To install a suitable database and application software for maintaining patient records. f) To maintain agreed service levels (99% uptime, 12 hrs operation etc)
User Charges	a) The entire amount of user charges, cost of consumables etc would be collected by Government b) To charge the patients for consumable at least 15% less than MRP. c) No user charges from BPL & HIV infected patients. Consumable cost to be reimbursed by GoUk. d) To maintain records of paying and non paying patients (BPL&HIV infected patients).

Value-for-Money for 5 year operation of Nephrology Center, Dehradun					
S No	Description	Government Outflow		Savings to Govt on PPP mode (Rs Lakhs)	
		Govt Project (Rs. Lakhs)	PPP mode (Rs. Lakhs)		
1.	Capital Cost	132.00	0.00	399.00	
2.	O & M Expenses	459.00	0.00	459.00	
3.	PV of Annual Grant for 5 yrs	0.00	369.00	(369.00)	
4.	Total	591.00	369.00	222.00	
S N	Description	PSC	Shadow Bid	Actual Bid and savings (PV of 5 yrs)	
				Apollo	Savings
1.	Number of procedures	49,500	59,400		
2.	Cost per procedure (Rs)	1,193.00	621.00	675 .00	518.00
Non-Cash Concession in terms of rental value of 480 Sq Mtr Space is Rs 62.00 Lakhs for five years. The net savings is 128.00 Lakhs.					

Project Cost - Dehradun		
Description	Rs Lakhs	Source
Capital cost	132.00	PPP partner
Present Value of Grant (5 yrs period)	369.00	Government
Milestones of the Project and time schedule (Dehradun)		
Milestone	Scheduled date	
Expression of Interest (EoI) released	14th October 2009	
Request for Proposal (RFP) released	20th Nov 2009	
Pre bid Meeting	6th November 2009	
Proposal Due Date	20th November 2009	
Contract signed	23rd February 2010	

Project Performance (Nephrology Centre, Dehradun)

The Nephrology Centre Project, Dehradun is running successfully at Coronation Hospital, Dehradun. The number of patients availing the services from Aug 2010-August 2011 is below:

Month	BPL Patient	APL Patient	Total
August 10	37	81	118
September 10	104	94	219
October 10	136	124	291
November 10	132	130	290
December 10	167	122	318
January 11	179	139	357
February 11	158	121	305
March 11	194	120	342
April 11	251	148	424
May 11	256	171	472
June 11	244	181	504
July 11	238	180	512
August 11	272	203	561

Milestones of the Project and time schedule (Nephrology Center, Haldwani)	
Milestone	**Scheduled date**
Request for Proposal (RFP) released	October 2010
Proposal Due Date	2nd November 2010
Contract Signed	8th March 2011
Nephrology Centre, Haldwani	
The Nephrology Centre Project, Haldwani has been awarded to Rahi Care on 8th March 2011. The project site has been handed over to the Concessionaire. The actual bid quoted by Rahi Care is 1,034.00 per procedure.	

Project Cost - Haldwani		
Description	**Rs Lakhs**	**Source**
Capital cost	139.00	PPP partner
Present Value of Grant (5 yrs period)	442.00	Government

Role of PPP Cell

The PPP Cell's role in the project was as under:

- Project Conceptualisation
- Financial/Business model
- Public Sector Comparator and Value-for-Money analysis
- Project Structuring
- Preparation of RFP/CA
- Interaction with Private Sector
- Facilitating Government approvals including EFC
- Bid Evaluation and finalizing on selection of PPP Partner
- Post implementation monitoring

Case Studies - PPP Projects in Health Sector in Uttarakhand

Operations and Management of: Thirteen Mobile Health Vans (MHVs) & Thirteen Mobile Medical Units under NRHM – One in each District of Uttarakhand

Project Concept:

The Government of Uttarakhand initiated a pilot project in October 2002 with TIFAC and Birla Institute to operate a Mobile Health Vans in six districts - Champawat, Nainital, Almora, Bageshwar, Pithoragarh and Chamoli for five years from 2002 to 2008. Based on the success and learning from this project, Government of Uttarakhand decided to replicate and roll out Mobile Health Vans in all the 13 districts.

The total camps organized by Birla Institute of Scientific Research Bhimtal, Nainital, Uttarakhand till 31st March 2008 was 988.

Project Brief:

Mobile Health Vans: Under a World Bank funding scheme thirteen (13) specially fabricated MHVs fitted with medical equipments like ultra sound machine, X-ray machine, automatic X-ray film processor, semi automatic analyser, centrifuge and 3 channel electrocardiogram (ECG) were procured.

The aforesaid MHVs were handed over to the private partner for operation and management through PPP mode for a period of five (5) years.

Description of Activities: MHVs	
Operation & Maintenance	a) To operate & maintain the MHVs –one in each district of Uttarakhand b) To organize outreach camps for medical services & provide diagnostic services c) To ensure regularity of service by ensuring permanent visit days d) To provide agreed number of medical staff with each van e) To record and maintain patient data in the Information System f) To provide reports to sponsoring department periodically g) To respond to emergency and disaster situation
User Charges	a) To collect user charges as per AIIMS stipulated rates b) To serve BPL patients free of cost
Inventory	a) To procure & supply best quality of medicines & consumables b) To ensure that no expiry dated medicines are supplied c) To maintain inventory of medicines d) To ensure "zero stock out" situation

Project Cost: MHVs			
S No	Description	Rs. Crores	Source
1.	Capital Cost (@ Rs 100 Lakhs/MHV)	13.00	World Bank
2.	O&M Cost (of all 13 MHVs for period of 5 yrs)	55.65	Government of Uttarakhand

Milestones of the Project and time schedule	
Milestone	Scheduled date
Expression of Interest (EoI) released	6th May 2008
Request for Proposal (RFP) released	28th Dec 2008
Concession Agreement signed with M/s Rajbhra Medicare for 2 districts	23rd March 2009
Concession Agreement signed with M/s Jain Video for 11 districts	31st March 2009
Commencement of operation	April 2009

Bid Process: MHVs

140 bidders responded to EOZ. Four (4) qualified for RFP. Two (2) Bidders - M/s Rajbhara for 2 districts and M/s Jain video for 11 districts were selected on the basis of lowest bid.

Project Performance (MHVs)

The project is running successfully in all the districts of Uttarakhand. The number of BPL patients availing the services is increasing. The number of patients availing the services of MHV (x-ray, ultrasound & ECG and pathology) is increasing in the state.

The actual performance of MHVs from April 2009 to July 2011 (28 months)

Contractor	April 2009 to Feb 2011	Camps	Patients	Tests	
				Radiology	Pathology
M/s Rajbhara Medicare for 2 Districts	Total	828	48920	18302	31017
	Avg/Dist/month	15	898	339	574
M/s Jain Video for 11Districts	Total	4492	356273	96774	140608
	Avg/Dist/month	15	1199	326	473

The Shadow Bid was estimated prior to the invitation of financial bids. After the receipt of actual bids, it was observed that Shadow Bid for six (6) districts were significantly (> 20%) higher than actual bids. The Shadow Bid analysis was helpful to the Department of Health and Family Welfare for taking the final decision.

Shadow Bid and actual bids for MHVs (Rs Lakhs/Annum)			
District	Shadow Bid	Actual Bid	Difference
Pithoragarh	107	111	3%
Dehradun	105	75	-28%
Haridwar	108	75	-31%
Chamoli	112	82	-27%
Rudraprayag	107	93	-13%
Tehri	107	93	-13%
Uttarkashi	107	82	-23%
Pauri	106	93	-12%
Almora	111	93	-16%
U S Nagar	111	75	-32%
Nainital	110	75	-32%
Bageshwar	106	93	-12%
Champawat	106	93	-12%

Role of PPP Cell

The PPP Cell's role in the project was as under:

- Project Conceptualisation
- Financial/Business model
- Public Sector Comparator
- Project Structuring
- Preparation of EOI
- Preparation of RFP/CA
- Interaction with Private Sector
- Facilitating Government approvals including EFC
- Bid Evaluation and finalizing on selection of PPP Partner
- Post implementation monitoring

Project Background
Mobile Medical Units (MMUs) under NRHM

These Mobile Medical Units were procured by the Dept. of Medical Health & family Welfare (DoMH&FW), Govt. of Uttarakhand in the year 2009 and were assigned to the Mother NGOs of each district of the State.

The MNGOs operationalize these MMUs for more than a year and now DoMH&FW decided to go for an open bidding to select the implementing organisations for these 13 MMUs.

Project Brief
Mobile Medical Units (MMUs) under NRHM

Under National Rural Health Mission scheme thirteen (13) Mobile Medical Units were procured.
The aforesaid Mobile Medical Units were handed over to the private partner for operation and management through PPP mode for a period of one (1) year.

The broad objectives of MMUs are:

a) To operationalize Mobile Medical Units in every district across the State for improved access to health care services
b) To make primary health care services available in underserved habitations of the State
c) To increase the provisions of improved reproductive and child health services in remote areas of the State
d) To provide the immunization and family planning services to the villagers at their doorstep

These MMUs are fitted with certain equipments to provide the basic primary health care services in the underserved habitations of the State. The MMU has an X-ray machine, a dark room and a pathological lab to conduct routine blood and urine examinations. The following equipments are available in MMU.

i. 60 mm X-Ray
ii. Two plate viewing screen
iii. Manual film processor with accessories
iv. Mercurial B.P. apparatus
v. Mercurial Thermometer
vi. Stethoscope
vii. Small Refrigerator 60 ltrs
viii. 5 kva silent Generators
ix. Binocular Microscope
x. Oxygen Cylinder etc.

Bid Process: MMUs

The RFP floated for the proposed project. Date of opening of technical proposal was 4th March 2011. Total fifty seven (57) bids were received from Eleven (11) applicants. Based on the technical evaluation, fifty six (56) bids were technically qualified. The Financial Proposals were opened on 5th April 2011. Based on the financial evaluation the project was awarded to the following three (3) applicants for 13 districts:

S.No	Applicants	Districts
1.	GVK Emergency Management and Research Institute (GVK EMRI)	I. Pithoragarh
2.	Rajbhra Medicare Pvt. Ltd.	I. Chamoli II. Uttarkashi III. Rudraprayag IV. Almora V. Tehri VI. Pauri VII. Udhamsinghnagar
3.	Society of People for Development (SPD)	I. Dehradun II. Nainital III. Champawat IV. Bageshwar V. Haridwar

Case Study- PPP Projects in Health Sector in Uttarakhand

108 Emergency Response Services in all districts of Uttarakhand

Project Objective

To operationalize the Emergency Response Services for the entire population of Uttarakhand and thereby improve the access to Medical, health care, police and fire services, particularly in attending the emergency situations relating to pregnant women, neonates, parents of neonates, infants and children in situations of serious ill-health and all other health emergencies in the general population; and thereby assist the state to achieve the critical Millennium Development Goals in the health sector, i.e., reduction of Infant Mortality Rate, and Maternal Mortality Rate, and in general reduce the vulnerability of the people to health emergencies or other emergencies like police & fire, if need be, by providing access to Emergency Response Services.

The project is operated and managed by GVK Group.

Description of Activities:	
Operation & Maintenance	a) To operate & maintain the Emergency Response Services for the entire population of Uttarakhand b) To assist the state to achieve the critical Millennium Development Goals in the health sector c) To ensure comprehensive emergency management using single number, training facilities and technology in the State d) To provide agreed number of medical staff with each van e) To record and maintain patient data in the Information System f) To undertake continuous and effective communication with the health authorities, including Medical Officer In-Charge (MOICs) at BPHCs, MOICs at PHCs at etc. g) To cooperate and assist the Committees and Agencies constituted by the Government or DoMH&FW
User Charges	Free service for all the citizens. The Government is paying 95% of total expenses.

District	2008-09	2009-10
Pithoragarh	8	8
Dehradun	8	8
Haridwar	5	5
Chamoli	8	8
Rudraprayag	4	4
Tehri	10	10
Uttarkashi	7	7
Pauri	14	14
Almora	10	10
U S Nagar	6	6
Nainital	10	10
Bageshwar	3	3
Champawat	3	3
Total	96	96

In 2008-09, the ambulances were deployed in phased manner and all 96 were not available for the entire year

The number average per day actual emergencies responded are as under:

District	2008-09	2009-10
Pithoragarh	24	38
Dehradun	32	52
Haridwar	04	13
Chamoli	22	26
Rudraprayag	11	18
Tehri	23	34
Uttarkashi	23	37
Pauri	41	51
Almora	30	44
U S Nagar	43	63
Nainital	52	73
Bageshwar	10	16
Champawat	12	15
Emergencies/yr	42,412	1,04,134

Role of PPP Cell

The Project was operational before the formation of PPP Cell. The PPP cell is advising on the operational aspects.

- PPP Cell has conducted a detailed analysis on service levels and cost elements.
- PPP Cell has advised on the contractual parameters on cost, service levels and business continuity strategy.
- Analysed the head wise actual costs advised on cost reduction strategy.

Case Studies - PPP Projects in Health Sector in Uttarakhand

Build -Operate-Transfer of Cardiac Centre at Coronation Hospital, Dehradun.

Project Brief

There are number of patients who require cardiac treatment on regular basis and also surgical intervention. At present there is no specialized cardiac centre run by government in Uttarakhand (process of setting up a cardiac centre at Almora is on). The cardiac treatment in private hospitals is very costly and is difficult for poor patients to continue treatment in private hospitals.

It was felt that a fully equipped cardiac centre be created in Dehradun to meet the demand of patients requiring cardiac care and cardiac surgical intervention.

Thus it was proposed to set up a Cardiac Centre in Coronation Hospital, Dehradun.

PPP structuring		
1.	PPP Model	Built Operate & Transfer (BOT) Model
2.	Concession Period	Ten (10) years
3.	Concession	a) Space measuring 2,500 sq meters at Coronation Hospital.
4.	Government Support	a) Space at Coronation Hospital. b) The government support as per bid outcome for Government bids.
5.	Benefit to Government	a) Maximizing service availability b) Reduction of O&M Cost c) Free service to BPL patients. d) To offer a 50% of beds for in-patients at government stipulated user charges. e) Transfer of Operational Risk to PPP partner f) Extended hours of operation compared to government setup

Description of Activities	
Build	a) To built a Cardiac Centre at a space measuring 2,500 sq meters available at Coronation Hospital. b) To procure, install and operate the machines for Invasive Cardiology, Heart Command Centre and Diagnostic facility.
Operation	a) To provide cardiac consultation to OPD and IPD patients b) Perform diagnosis and surgeries c) To respond to emergency cases during odd hours also. d) To recruit the required personnel including cardiologists, technicians, nurses and other support staff. e) To install a suitable database and application software for maintaining patient records. f) To ensure a minimum agreed up-time of the facilities.
User Charges	a) No user charges for OPD Consultation for all patients b) CGHS Diagnostic rates for all patients (Govt and Pvt) c) Government bed patients to be charged CGHS rate for IPD bed, Surgeries and other procedures d) Private Patients to pay market charge for IPD, Surgeries and other procedures e) To charge the patients for consumable at least 15% less than the prevailing MRP. f) To serve the BPL patients free of cost

Project Cost			
S No	Description	Amount	Source
1.	Capital cost (Rs Lakhs)	1,767	PPP partner
2.	Present Value of Grant (Rs Lakhs)	1,438.00	Government
3.	Actual Bid (Rs/month/Govt bed)	99,200	Bid outcome

Milestones of the Project and time schedule	
Milestone	Scheduled date
Expression of Interest (EoI) released	2nd Oct 2009
RFP released	8th Oct 2010
Pre proposal Meeting	3rd Nov 2010
Agreement signed	8th March 2011

Bid Process

The EOI was released on 2nd October 2009. A total of eight (8) applications received. Out of eight (8), five (5) applications were shortlisted. The RFP was released on Oct 2010 with due date 3rd Nov 2010.

Current Status

The project has been awarded to the Fortis Healthcare Limited for ten years. The agreement was signed on 8th March 2011 in the presence of Honourable Chief Minister of Uttarakhand.

Role of PPP Cell

The project is initiated by the Directorate General of Medical Health and Family Welfare (DoMHFW), Government of Uttarakhand (GoUk).

The PPP Cell's role in the project was as under:

- Project Conceptualisation
- Financial/Business model
- Project Structuring
- Preparation of RFP/CA
- Interaction with Private Sector
- Facilitating Government approvals including EFC
- Bid Evaluation and finalizing on selection of PPP Partner

Case Studies - PPP Projects in Health Sector in Uttarakhand

Setting up a Oncology Centre in Himalayan Institute Hospital Trust, Doiwala

Project Structuring		
1.	Project Rationale	Currently there is no Specialized Cancer Centre in Uttarakhand
2.	Partners	Government of Uttarakhand and HIHT
3.	PPP Model	Build-Own-Operate
4.	Concession Period	20 Years
5.	IPD Beds	Government beds 75 (40%) and Private Beds 114 (60%)
6.	Financial Grant	a) Capital Grant b) Per procedure revenue Grant for Government Patients for radiotherapy, chemotherapy and surgery c) No grant for OPD, IPD beds and Diagnostic Services
7.	Identified Services	a) OPD, b) Diagnostic services – MRI, Gamma Camera, CT Scan etc, c) Surgical services, d) Radiotherapy, e) Chemotherapy, f) hospice, g) Community Cancer Control, h) epidemiology
8.	Tariff Regulation	a) CGHS rates for diagnostic procedures for all patients b) CGHS rates for surgical, radiotherapy & chemotherapy for government bed patients c) IPD charges for Govt beds as per Govt rates
9.	Monitoring	a) Expert Committee

Role of PPP Partner - HIHT	
a	Build the facility which includes Cancer Centre, Residences, Sarai, Hospice, water & power supply, waste disposal etc
b	Procure, install, operate and maintain all medical and non medical equipments
c	Recruit and manage medical and non medical personnel (approx 490)
d	Provide all services described above and medical engineering support services
e	Collect user charges from patients and grant amount from government
f	Maintain patient records, books-of-accounts, inventory, other statutory records
g	Quality assurance, quality control and continuous process improvement
h	Effective coordination with government for auditing, performance monitoring, capital goods procurement

Role of Government	
a.	Enter into PPP Concession agreement with HIHT
b.	Budgetary provision for Capital and Revenue grant – annual basis during Concession period
c.	Auditing and performance monitoring
d.	Contract Management
e.	Awareness
Grant structure	
a)	The regulated user charges are significantly lower than the market rates resulting in a revenue deficit. To meet the "deficit', it is proposed to provide "per procedure" grant for radiotherapy, surgery and chemotherapy procedures for patient of government beds. There would be "no grant" for OPD, IPD Bed charges and diagnostic services.
b)	It is proposed to provide capital grant for purchase of equipments, building and cancer research centre to the extent of 80%.
c)	The revenue grant per procedure would be the difference between private rate and CGHS rate. The revenue grant would be given to the Concessionaire on every procedure completed on patient of government beds.
d)	The escalation of revenue grant would be capped to secure against any unprecedented increase in the private rates. The maximum allowable increase in any year over previous year shall be 5%, which may be reviewed periodically against Consumer Price Index (CPI) for any correction.

Financial Share

The funding pattern of the proposed project is as under (Rs Crores):

Description	Incurred		Projected	
	HIHT	Govt	HIHT	Govt
Land	3.56	-	2.02	-
Building	3.87	6.75	3.04	12.14
Equipments	0.65	13.25	17.07	68.29
PV of net O&M	1.57	-	37.41	58.21
BPL Reimbursement	-	-	-	26.47
TOTAL	9.65	20.00	59.55	165.11

Description	Funding (Rs Crores)		%age Funding	
	HIHT	Govt	HIHT	Govt
Land	5.59	-	100%	0%
Building	6.90	18.89	27%	73%
Equipments	17.72	81.54	18%	82%
PV of net O&M	38.98	58.21	40%	60%
BPL Reimbursement	-	26.47	0%	100%
TOTAL	69.19	185.11	27%	73%

Value for Money (VfM)

a) The value-for-money analysis indicates the estimated net cash outflow for the government in case the project is taken up by conventional procurement i.e. project build and operated by government vis-à-vis in case the project is taken up in PPP mode.

b) The VfM also indicates the net estimated savings to the government in case the project is taken up in PPP mode.

c) All the values indicated below are in terms of Present Value (PV) in Rs Crores

S No	Description	Government Cash outflow		Savings
		Govt Project	PPP mode	
1.	Land	5.59		5.59
2.	Project Cost	139.85		139.85
3.	Net Recurring Expenses	311.73		311.73
4.	Capital Grant		100.43	(100.43)
5.	Revenue Grant		58.21	(58.21)
6.	Reimbursement for BPL		26.46	(26.46)
	TOTAL	457.16	185.11	272.05

Present Status

The Project is under Government Approval

Role of PPP Cell

The PPP Cell's role in the project was as under:

- **Project Conceptualisation**
- **Financial/Business model**
- **Public Sector Comparator and Value-for-Money analysis**
- **Project Structuring and Grant Structure**
- **Preparation of RFP/CA**
- **Interaction with Private Sector**
- **Facilitating Government approvals including EFC**
- **Preparing the Cabinet Note for approval**

Case Studies - PPP Projects in Health Sector in Uttarakhand

Built-Operate-Transfer of AYUSH Gram at Bhawali, Nainital

Project Brief

Uttarakhand is a place for millions of medicinal plants since long time. The vast forest land is source of many medicinal plants. The people of Uttarakhand have significant knowledge, experience and skills towards identifying, growing, collecting, processing, purifying and developing medicinal drugs.

The State Government has plans to set up One AYUSH gram in each of the thirteen districts. As a start up of the program, the Government of Uttarakhand decided to set up AYUSH Gram at Bhawali as the first venture.

PPP structuring		
1.	PPP Model	Build-Operate-Transfer (BOT)
2.	Concession Period	a) A land measuring 10 acres has been provided to set up the Ayush Gram at Bhawali, Nainital. b) Right to collect user charges c) Right to O&M project facilities
3.	Government Income	a) Upfront payment of Rs 2.50 Crores b) Revenue share with Government is 6.33%
4.	Benefit to Government	a) Maximizing service availability b) Reduction of O&M Cost c) Transfer of Risk of Operations to PPP partner

Description of Activities	
Build	a) To built Ayush Gram at Bhawali, Nainital. b) To set up a minimum 60 beds IPD facility
Operation & Maintenance	a) To manage the Out-Patient and In-Patient Departments and provide best patient care b) To interact and involve local community in growing and managing the herbal garden c) To install a latest version of licensed hospital management, hotel management and drug manufacturing unit application software d) To maintain detailed records of medicinal plants in Herbal Garden
User Charges	a) To offer a 15% of beds in the hospital to Government and charge user fees as stipulated by the Government for those beds. b) To charge the patients for consumable at a rate which would be at least 15% less than the prevailing MRP

Project Cost			
S No	Description	Rs Crores	Source
1.	Capital cost (estimated)	50.00	PPP partner
2.	Upfront Payment	2.50	PPP partner
3.	Revenue share	6.33%	As per the bid outcome

Milestones of the Project and time schedule	
Milestone	Scheduled date
Expression of Interest (EoI) released	25th Jan 2010
RFP released	21st April 2010
Bid Due Date	28th April 2010
Contract signed	15th August 2010

Current Stage

The project has been awarded to Emami Limited for thirty five years. The contract is signed on 15th August 2010 in the presence of honourable Chief Minister of Uttarakhand.

Land survey is completed and concessionaire is ready to commence construction.

Role of PPP Cell

The project is initiated by the Directorate of Ayurvedic and Unani Services (DOA&US), Government of Uttarakhand (GoUk).

- Project Conceptualisation
- Financial/Business model
- Project Structuring
- Preparation of RFP/CA
- Interaction with Private Sector
- Facilitating Government approvals including EFC
- Bid Evaluation and finalizing on selection of PPP Partner

The GoI-ADB PPP Initiative
Mainstreaming PPPs in India