Document of
The World Bank

Report No: ICR00001139

IMPLEMENTATION COMPLETION AND RESULTS REPORT
(Loan/Credit No.: 3338-IN)

ON A

CREDIT

IN THE AMOUNT OF SDR 82.1 MILLION
(US$ 110.00 MILLION EQUIVALENT)

TO

INDIA

FOR A

UTTAR PRADESH HEALTH SYSTEMS DEVELOPMENT PROJECT

June 26, 2009

Health, Nutrition and Population Sector Department
India Department
South Asia Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective December 31, 2008)

Currency Unit = Rupee
US$ 1.00 = Rupee 48.31
Rupee 1.00 = US$ 0.0207

FISCAL YEAR
[April 1 – March 31]

ABBREVIATIONS AND ACRONYMS

ALOS	Average Length of Stay
APS	Annual Performance Survey
BCC	Behavior Change Communication
BOR	Bed Occupancy Rate
CAS	Country Assistance Strategy
CHC	Community Health Center
DH (M) & DH(F)	District Hospital (Male) &) District Hospital (Female)
DHS	Directorate of Health Services
DMC	District Management Committee
DO	Development Objective
FMS	Financial management system
GO	Government Order
GOI	Government of India
GOUK	Government of Uttarakhand
GOUP	Government of Uttar Pradesh
HCWMP	Health Care Waste Management Plan
HMIS	Health Management Information System
IDA	International Development Association
IEC	Information, education and communication
IPD	In-patient Department
KPI	Key Performance Indicators
MTR	Mid-Term Review
NGO	Non-government organization
NRHM	National Rural Health Mission
OPD	Out-patient department
PAD	Project Appraisal Document
PGB	Project Governing Board
PHC	Primary Health Center
PM	Project Manager
PMU	Project Management Unit
PIP	Project Implementation Plan
PSR	Project Status Report

PSS	Patient Satisfaction Survey
QI	Quality Improvement
RCH	Reproductive and Child Health Project II
SC	Scheduled Castes
SDP	State Domestic Product
SCD	Survey of Cause of Death
SHSDP	State Health Systems Development Projects
SPC	Strategic Planning Cell
ST	Scheduled Tribes
UPHSDP	Uttar Pradesh Health Systems Development Project
UKHSDP	Uttarakhand Health Systems Development Project

Vice President:	Isabel M. Guerrero
Country Director:	N. Roberto Zhaga
Sector Manager:	Julie Mclaughlin
Project Team Leader:	Vikram Sundara Rajan
ICR Team Leader:	Snehashish Rai Chowdhury

INDIA

UUTAR PRADESH AND UTTARAKHAND HEALTH SYSTEMS DEVELOPMENT PROJECT

CONTENTS

A. Basic Information			
Country:	India	Project Name:	Uttar Pradesh Health Systems Development Project
Project ID:	P050657	L/C/TF Number(s):	IDA-33380
ICR Date:	06/30/2009	ICR Type:	Core ICR
Lending Instrument:	SIM	Borrower:	INDIA, ACTING BY ITS PRESIDENT
Original Total Commitment:	XDR 82.1M	Disbursed Amount:	XDR 56.0M
Environmental Category: B			
Implementing Agencies: Govt of UP/Govt of Uttaranchal			
Cofinanciers and Other External Partners:			

B. Key Dates				
Process	**Date**	**Process**	**Original Date**	**Revised / Actual Date(s)**
Concept Review:	03/08/1999	Effectiveness:		07/26/2000
Appraisal:	01/23/2000	Restructuring(s):		
Approval:	04/25/2000	Mid-term Review:		11/06/2003
		Closing:	12/31/2005	12/31/2008

C. Ratings Summary	
C.1 Performance Rating by ICR	
Outcomes:	Moderately Satisfactory
Risk to Development Outcome:	Moderate
Bank Performance:	Moderately Satisfactory
Borrower Performance:	Moderately Satisfactory

C.2 Detailed Ratings of Bank and Borrower Performance (by ICR)			
Bank	**Ratings**	**Borrower**	**Ratings**
Quality at Entry:	Moderately Satisfactory	Government:	Moderately Satisfactory
Quality of Supervision:	Moderately Satisfactory	Implementing Agency/Agencies:	Moderately Satisfactory
Overall Bank Performance:	Moderately Satisfactory	**Overall Borrower Performance:**	Moderately Satisfactory

C.3 Quality at Entry and Implementation Performance Indicators			
Implementation Performance	**Indicators**	**QAG Assessments (if any)**	**Rating**
Potential Problem Project at any time (Yes/No):	No	Quality at Entry (QEA):	None
Problem Project at any time (Yes/No):	Yes	Quality of Supervision (QSA):	None
DO rating before Closing/Inactive status:	Moderately Satisfactory		

D. Sector and Theme Codes		
	Original	**Actual**
Sector Code (as % of total Bank financing)		
Health	87	87
Sub-national government administration	13	13
Theme Code (as % of total Bank financing)		
Gender	14	14
Health system performance	29	29
Population and reproductive health	28	28
Tuberculosis	29	29

E. Bank Staff		
Positions	**At ICR**	**At Approval**
Vice President:	Isabel M. Guerrero	Mieko Nishimizu
Country Director:	N. Roberto Zagha	Edwin R. Lim
Sector Manager:	Julie McLaughlin	Richard Lee Skolnik
Project Team Leader:	Vikram Sundara Rajan	David H. Peters
ICR Team Leader:	Snehashish Rai Chowdhury	
ICR Primary Author:	Snehashish Rai Chowdhury	

F. Results Framework Analysis

Project Development Objectives (from Project Appraisal Document**)**
To establish a well-managed health system in Uttar Pradesh which delivers more effective services through policy reform, institutional and human resource development, and investment in health services.

Revised Project Development Objectives (as approved by original approving authority)
NA

(a) PDO Indicator(s)

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
Indicator 1 :	UP: Improved health facility quality and efficiency, as measured at project facilities by: increased (a) outpatient visits; (b) hospital admissions; (c) bed occupancy; (d) institutional deliveries; (e) patient satisfaction and (f) referrals to CH/DH.			
Value quantitative or Qualitative)	(a) overall-9,166,384, poor-19%, women-41%; (b) overall-4,72,870, poor-12%, women-36%; (c) CHC-20%, CH/DH(M)-50%, DH(F)-41%; (d) 1,32,972; (e) satisfaction with cleanliness, availability of doctors etc; (f) None.	(a) overall-11,000,000, poor-not available, women-50%; (b) overall-6,00,000, poor-35%, women-50%; (c) CHC-50%, CH/DH(M)-70%, DH(F)- 60%; (d) 2,00,000; (e) None; (f) none.	(a) overall-52,46,876, poor-25%, women-50%; (b) overall-5,26,775, poor-25%, women-50%; (c) CHC-20%, CH/DH(M)-70%, DH(F)-60%; (d) 1,04,289; (e) satisfaction with cleanliness, availability of doctors etc; (f) Increased.	(a) overall-53,36,505, poor-not measured, women-47.1%; (b) overall-4,23,798, poor-not measured, women-60.6%; (c) CHC-18.1%, CH/DH(M)-55.2%, DH(F)- 58.9%; (d) 59,439; (e) overall satisfaction increased from 1.97 to 2.56 on a 4 point scale; (f) none.
Date achieved	03/30/2000	12/31/2005	12/31/2005	12/31/2005
Comments (incl. % achievement)	After 2005, the focus shifted to 4 agreed districts with added indicators, end-line for which was not completed. Targets were revised after bifurcation and during MTR after standardization due to change in user charges and correction of baseline.			
Indicator 2 :	UK: Improved health facility quality and efficiency, as measured at project facilities by: increased (a) outpatient visits; (b) hospital admissions; (c) bed occupancy; (d) institutional deliveries; (e) patient satisfaction and (f) referrals to CH/DH.			
Value quantitative or Qualitative)	(a)overall-1,029,522, poor -not available, women-47.8%; (b) overall -67,904, poor-not available, women- 63.2%; (c) CHC-29.6%, CH/ DH(M)-60.2%, DH(F)-53.4%; (e) satisfaction with cleanliness, availability of doctors etc. (f) none	(a)overall-1,845,029, poor -20%, women-52%; (b) overall -1,08,038, poor-25%, women-64%; (c) CHC-50%, CH/ DH(M)-80%, DH(F)-80%; (e) satisfaction with cleanliness,		(a)overall-1,978,573, poor -not available, women-54.7%; (b) overall -1,28,596, poor-not measured, women- 68%; (c) CHC-41.8%, CH/ DH(M)-89.3%, DH(F)-99.7%; (e) satisfaction with

		availability of doctors etc. (f) increased		cleanliness, availability of doctors etc. was static (f) none
Date achieved	11/30/2001	12/31/2005		12/31/2008
Comments (incl. % achievement)	With the exception of bed occupancy rate in CHCs and patient satisfaction, all targets were achieved.			
Indicator 3 :	UP: (a) Increased proportion of state budget spent on health (plan and non-plan budget)and (b) increasing shares of public sector health recurrent expenditures spent on non-wage operating costs.			
Value quantitative or Qualitative)	(a)4.8%, (b)23%	(a)6.5%, (b) 30%		(a) 6.4%, (b) 28.66%
Date achieved	03/30/2000	12/31/2005		12/31/2008
Comments (incl. % achievement)	Increased over the years. Target almost achieved.			
Indicator 4 :	UK: (a) Increased proportion of state budget spent on health (plan and non-plan budget)and (b) increasing shares of public sector health recurrent expenditures spent on non-wage operating costs.			
Value quantitative or Qualitative)	No values when bifurcated into new state in 2001.	(a) 6%, (b) 25%		(a) 4.44%, (b) 35.72%
Date achieved	03/30/2000	12/31/2005		12/31/2008
Comments (incl. % achievement)	Increasing trend over the years. Considering UK is a new state which was given targets for increase in health budget that was comparable to UP, the increase in both (a) and (b) are impressive.			

(b) Intermediate Outcome Indicator(s)

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
Indicator 1 :	(For UP) Strengthened policy development in the state			
Value (quantitative or Qualitative)	Nil, no systems in place	Policy recommendations on a. developing partnership with the private sector b. revising the essential drugs policy. c. reforming manpower use	Policy Analysis Unit established and 5 policy reviews conducted and position papers submitted to Strategic Management Board.	Policy Analysis Unit established and 5 policy reviews/workshops held; 3 position papers submitted to GOUP.
Date achieved	03/30/2000	12/31/2003	12/31/2007	12/31/2008

Comments (incl. % achievement)	The target value was put during the extension phase in 2006 against the original indicator saying - Strategic Management Board prepared recommendations based on policy options papers from Strategy Support Group. Value achieved.			
Indicator 2 :	(For UK) Strengthened strategic management capacity through establishing Strategic Management Board and Strategic Support Group and prepare recommendations based on policy options paper			
Value (quantitative or Qualitative)	Nil, no systems in place	Adequate structures for policy dialogue established and functioning		Project produced several policy proposals but response from GOUK poor.
Date achieved	03/30/2000	12/31/2008		12/31/2008
Comments (incl. % achievement)	Partial achievement due to lack of appropriate response from GOUK.			
Indicator 3 :	(For UP and UK) Support to institutional strengthening undertaken (Organizational Review and Development)			
Value (quantitative or Qualitative)	No action taken	(Not an original indicator)	Two phases of Organizational Review completed and a revised structure for the Health Directorate presented to the Strategic Management Board	Draft report on Organizational Development and revised organogram submitted for actions for UP and UK.
Date achieved	07/08/2004	07/08/2004	12/31/2007	12/31/2008
Comments (incl. % achievement)	This indicator was included during extension period to reflect policy changes agreed in PAD. Achieved.			
Indicator 4 :	(For UP and UK) Hospital care waste management (HCWM) system implemented			
Value (quantitative or Qualitative)	NIL, no systems were in place	All facilities implement and monitor HCWM		(UP) HCWM functioning in all 10 CTFs ; (UK) HCWM improved in all project facilities.
Date achieved	03/30/2000	12/31/2008		12/31/2008
Comments (incl. % achievement)	Partially achieved. While the establishment of HCWM systems and procedures was achieved although quality issues still remained.			

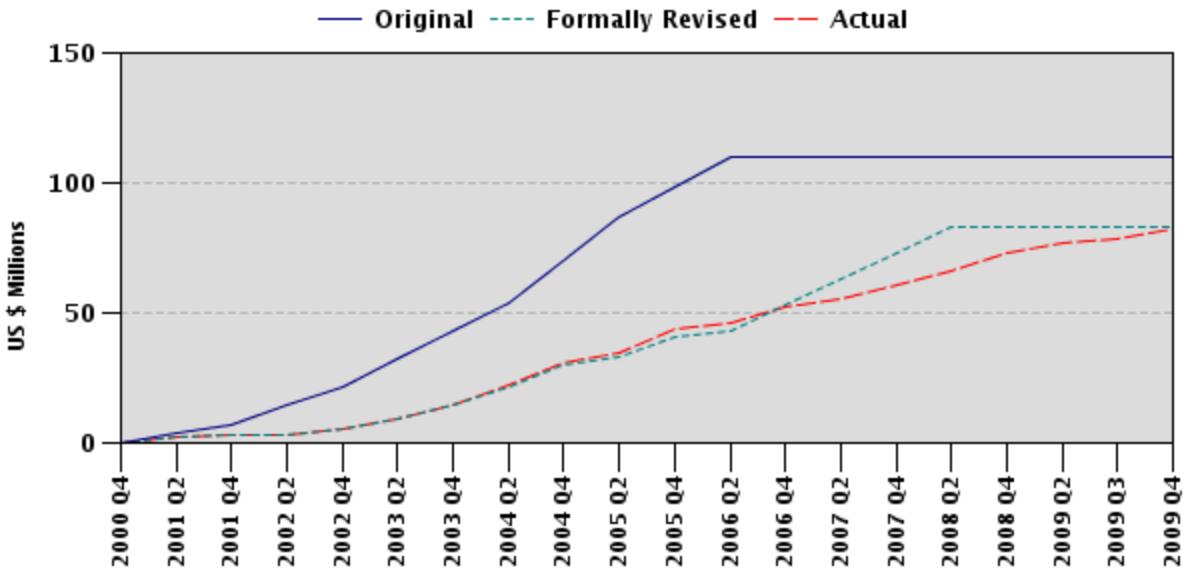
G. Ratings of Project Performance in ISRs

No.	Date ISR Archived	DO	IP	Actual Disbursements (USD millions)
1	06/01/2000	Satisfactory	Satisfactory	0.00
2	12/05/2000	Satisfactory	Satisfactory	2.50
3	05/24/2001	Satisfactory	Unsatisfactory	2.91
4	07/24/2001	Satisfactory	Satisfactory	2.91
5	01/03/2002	Satisfactory	Satisfactory	3.12
6	06/27/2002	Satisfactory	Satisfactory	5.05
7	12/23/2002	Satisfactory	Satisfactory	9.20
8	06/25/2003	Satisfactory	Satisfactory	14.85
9	11/17/2003	Satisfactory	Satisfactory	19.55
10	05/18/2004	Satisfactory	Satisfactory	31.04
11	11/04/2004	Satisfactory	Unsatisfactory	34.54
12	03/23/2005	Satisfactory	Moderately Unsatisfactory	38.08
13	09/23/2005	Unsatisfactory	Unsatisfactory	44.89
14	03/13/2006	Moderately Unsatisfactory	Satisfactory	49.38
15	06/27/2006	Moderately Satisfactory	Satisfactory	52.23
16	12/19/2006	Moderately Satisfactory	Satisfactory	55.23
17	06/18/2007	Satisfactory	Satisfactory	60.50
18	12/15/2007	Satisfactory	Satisfactory	66.16
19	06/12/2008	Satisfactory	Satisfactory	72.53
20	12/22/2008	Moderately Satisfactory	Moderately Satisfactory	75.10

H. Restructuring (if any)

Not Applicable

I. Disbursement Profile



1. Project Context, Development Objectives [or Global Environment Objectives] and Design (this section is descriptive, taken from other documents, e.g., PAD/ISR, not evaluative):

1.1 Context at Appraisal (brief summary of country and sector background, rationale for Bank assistance):

The Uttar Pradesh Health Systems Development Project (UPHSDP) was approved by the Bank's Board on April 25, 2000 and became Effective on July 26, 2000. In November 2000, the state of UP was bifurcated into UP and Uttarakhand (UK), following which a separate Development Credit Agreement (DCA) and Project Agreement (PA), were signed with the new state on November 8, 2001. However, the Effectiveness date for both states was July 26, 2000.

At the time of preparation of the original project, the health sector in UP was one of the most vulnerable in India. UP is the most populous state in the country, with a population of about 160 million; at the time of preparation, the state had the worst human development index among Indian states (0.07), largely due to widespread poverty and illiteracy. Major sector issues identified included:

Financing Issues: Public spending in UP was low by international standards at 1% of state GDP. Of the resources allocated, about 77% was consumed by salaries, and non-salary recurrent costs were chronically under-funded.
Organization and Management of Health Systems: Structural problems within the health sector in UP included: overly centralized planning and control over resources; political interference over staff postings and transfers; lack of coordination between the different arms of the health system; and neglect of opportunities to coordinate with the private sector.
Delivery of Health Services: UP was already going through an epidemiological transition, with an emerging burden of non-communicable diseases. Despite this, health services were under-utilized in UP, largely due to poor quality of care in both public and private sector facilities.
Use and Demand Factors: Due to poverty and illiteracy, a large proportion of the population was unaware of behaviors that promote good health, and were not in a position to make informed health decisions. Expectations of the health system were low, and mechanisms to hold public and private health care providers accountable were non-existent.

Government Strategy: Government of UP (GOUP) was in the process of developing a comprehensive approach to public sector reforms across the state. At the central level, Government of India (GOI) had declared health as one of the six priority areas identified in the Ninth Plan (1997-2002), and noted the importance of linking preventive and promotive care with selective aspects of curative care provided at first referral hospitals.

The project was in keeping with the Bank's **Country Assistance Strategy** (CAS; Report No. 17241 -IN; dated December 19, 1997) which emphasized comprehensive but phased reform across all sectors, with an early emphasis on large fiscal gains and human capital investment. The Health, Nutrition and Population sector was central to this strategy seeking to reduce poverty, enable people to achieve their full potential and participate in a productive workforce. The project also took into account the sector strategies for that time, as well as the recommendations of existing sector work.

The value-added of IDA support was to link the health sector with the broader set of cross-cutting and sectoral reforms in UP; leverage the financial support to introduce new ideas and ways of doing business in the health sector; and bring extensive experience both within India and internationally on health systems development issues.

1.2 Original Project Development Objectives (PDO) and Key Indicators [as approved]:

To establish a well managed health system in Uttar Pradesh/Uttarakhand which delivers more effective services through policy reform, institutional and human resource development, and investment in health services. PDO indicators were:

1. Improved health facility quality and efficiency, as measured at project facilities by: (i) increased outpatient visits overall, by women and by the poor; (ii) increased in-patients overall, by women and by the poor; (iii) increased bed occupancy; (iv) increased institutional deliveries; (v) increased patient satisfaction overall, by women and by the poor; and (vi) increased number of appropriate referrals from PHCs to CHCs and CH/BH.
2. Improved Health Sector Spending through (i) increased portion of GOUP revenue budget spent on health sector (plan and non-plan); and (ii) increasing shares of public sector health recurrent expenditures spent on non-wage operating costs.

1.3 Revised PDO (as approved by original approving authority) and Key Indicators, and reasons/justification:

N/A

1.4 Main Beneficiaries (original and revised; briefly describe the "the primary target group" identified in the PAD and as captured in the PDO[GEO], as well as any other individuals and organizations expected to benefit from the project):

The main benefit of the project was to help establish an effective and sustainable health system in UP/Uttarakhand, to better meet the health needs of the states' population. In the public sector where physical rehabilitation was planned, an estimated 11 million people in UP who received treatment as outpatients per year and 600,000 inpatients per year were to benefit from improved services. The planned improvements in existing facilities were to increase the numbers receiving services by 2 million outpatients per year and 130,000 inpatients per year. Improvements under the project were targeted to improve quality and access of curative and preventive health services for the poorest segments of UP, for women, and for remote, under-served populations. Improving the health of the poor and the sick would improve their quality of life and productivity. Since the cost of catastrophic illness is a major cause of poverty, there would also be direct gains in reducing poverty. A focus on women's health services was also part of project design. The project also reached the underserved and disadvantaged population through NGOs.

1.5 Original Components (as approved):

Component 1 (US$30.20 million): Policy Reform, Management Development and Institutional Strengthening

A. Developing a Strategic Management Capacity (US$0.7 million) to enhance competence for formulating and reviewing strategies within the Department of Medical, Health and Family Welfare (DOMHFW) through the establishment of a Strategic Management Board, supported by a Strategy Support Group (SSG).
B. Strengthening Performance, Accountability and Efficiency (US$13.2 million) to build a management culture oriented towards operational effectiveness and efficiency through the establishment of a comprehensive Health Management Information System (HMIS), management training of various cadres, development of a manpower plan and contracting out of support services at facilities to improve efficiency and accountability.
C. Building Implementation Capacity (US$16.3 million) by the establishment of a dedicated Project Management Unit (PMU) for project implementation, having all the necessary skills and authority to execute the project.

Component 2 (US$97.40 million): Improving Health Service Quality and Access

A. Improving Clinical Service Quality (US$75.9 million) to improve the quality of clinical practices by

improving the skills of health providers, introducing quality assurance (QA) systems, and utilizing appropriate facilities, equipment, drugs and medical supplies.

B. Improving Public Health Service Quality (US$18.5 million) by re-establishing a disease surveillance and control system, including for food safety, health sector waste management and health communications.
C. Improving Access to Health Services (US$3.0 million) particularly in remote areas, by engaging with Non-Government Organizations (NGOs) to provide health care and facilitate health seeking behavior where there are few private sector alternatives.

1.6 Revised Components:

Due to the bifurcation of the state of UP into UP and UK in November 2000, the scope and costs of components were changed (see below). A separate Project Implementation Plan (PIP) for UK was developed, within the original framework and without changing components; however, total costs were divided in a 86:14 ratio between the states of Uttar Pradesh and Uttarakhand respectively based on budgets produced for the respective Project Implementation Plans of the states.

1.7 Other significant changes (in design, scope and scale, implementation arrangements and schedule, and funding allocations):

Project components were never formally changed but were re-oriented at the time of project extension in December 2005 and indicators were changed as part of "minor restructuring and extension of closing date" of the project. The Bank team in August/ September 2005 recommended that the Bank support the state to restructure the project and provide a two-year extension during which period the project would shift focus and activities more towards achievement of the MDGs, instead of improving the use of hospitals and health facilities through the strengthening of physical infrastructure and provision of equipment. In 2006, the original first PDO indicator for UP was revised in aide memoires and ISRs in 2006 to "improved health facility quality and efficiency, as measured by full implementation of the 4 agreed District Action Plans". Additional intermediate indicators, with 2006 as baseline, were also introduced to capture the re-orientation appropriately. However, no formal restructuring was done and the PDO was not changed.

The first extension to the project in both the states was approved on 28 December 2005, on grounds of "strategic reasons resulting from change in policy and institutional development". Specific justifications for extension of the project included (i) significant opportunity for enhanced achievement of project development objectives in keeping with national and international global health goals; (ii) importance for IDA's sector strategy for India and (iii) substantial change in project leadership and support at state level.

Project funds were revised on two occasions. Following the bifurcation of the state on November 9, 2000, and based on criteria agreed between DEA, the Bank and the states, separate Project Implementation Plans (PIPs) were prepared for each state, where the base costs of the project were agreed at Rs. 4510 million or approximately $93.94 million (85.9% of the Credit) for UP and Rs. 740 million or approximately $15.83 million for UK (14.1% of the Credit). The IDA share for the project divided into UP and Uttarakhand were SDR 70.56 million (equivalent to $90.24 million) and SDR 11.54 million (equivalent to $14.76 million) respectively. In addition, SDR 19.897 million was diverted to the Tsunami Relief project in 2005 at the request of the GOI and the cost was revised accordingly.

2. Key Factors Affecting Implementation and Outcomes

2.1 Project Preparation, Design, and Quality at Entry (including whether lessons of earlier operations were taken into account, risks and their mitigation identified, and adequacy of participatory processes, as applicable):

Project Preparation and Design: As found in other State Health Systems Development Projects (SHSDP), the project focused on physical upgrading of facilities and equipment; with investments in a mix of strategies for quality enhancement and increased access to the poorest. Innovations were introduced in project design with regard to phasing: the first phase of the project was intended to initiate the processes for health policy development, including the establishment of a health policy unit and a forum for PPP, and the implementation of critical new policies on essential drugs, user charges and manpower placement; the next phase was meant to firmly establish the reforms and make existing public infrastructure fully functional through rehabilitation and re-equipment; finally, an expansion phase was planned, to be taken up in a subsequent IDA-funded operation i.e. a follow-on project, building on the achievements of the present project. In effect, however, the first and second phases were combined due to various implementation delays and other constraints, and implementation followed the course generally set by other SHSDPs.

Quality at Entry: Based on lessons learned from previous SHSDPs (PAD, Annex 12), a set of risks was identified, including poor project management, problems with flow of funds, and inability to stimulate demand. However, the suggested mitigation measures relied largely on the Letter of Health Sector Development Program to be provided by GOUP and included in the legal agreements. This letter (PAD, Annex 11) outlines the government's intentions on a list of critical policy issues; which though ambitious, identified major elements required to improve the health system, including increasing health budget, improving public accountability through issuance of a Citizens' Charter, improving access to women and disadvantaged population, taking account of scope and services of the non-governmental sector.

A Social Assessment (SA) was carried out as part of preparation activities; and the findings of the SA and other studies on Health Services Utilization and the Patient Satisfaction Survey were incorporated into project design. End beneficiaries and user groups were consulted during preparation, and systems for monitoring of user fees and facility utilization with the participation of community groups and Panchayati Raj (or local government) Institutions were incorporated into project design.

Several studies and analyses were undertaken at the time of preparation. These included a state public expenditure review, benefit incidence study, beneficiary needs assessment, technical analyses on service norms, manpower needs and other utilization data, and institutional assessment. A facility survey had been completed to estimate the extent and costs of rehabilitation/reconstruction of health facilities. The PIP had been appraised and found to be realistic and satisfactory. Procurement documents for the first year's activities were complete and ready for implementation. Several important actions were specified as Conditions of Negotiations, including appointment of key project staff and preparation of the first year's bidding documents.

2.2 Implementation (including any project changes/restructuring, mid-term review, Project at Risk status, and actions taken, as applicable):

Several factors affected project implementation progress:

Delays in Project Start-Up: Although the project became Effective in July 2000, it was officially launched by GOUP after a six month delay in late December 2000. This was followed by further delays due to (i) initial delays in staffing the PMU; (ii) the bifurcation of the state into UP and UK on November 9, 2000; (iii) delay in the appointment of a Procurement Agent for civil works, and need to re-do the facilities survey, planning and costing; and (iv) delay in the appointment of a Procurement Agent for goods/services. In the case of UK, the main causes for delayed start-up were: (i) the late signing of a revised DCA to recognize UK as a separate implementing agency, 18 months after the project had been approved by the Bank's Board; (ii) adjustments needed in project design and implementation plan to reflect the special needs of UK; (iii) state general elections in early 2002; and (iv) acute shortage of civil servants in the newly created state, as a result of which the Project Director (PD) held multiple portfolios.

High staff turnover: The project experienced a substantial turnover in key staff. In UP, there were 10 PDs during the life of the project, several for a period of less than a few months. In UK, the PD often had multiple charges. The Mid-Term Review (MTR) specifically identified the lack of continuity in leadership as an obstacle to continued and sustained implementation.
Poor performance on key activities: Civil works and equipment: Costs of civil works almost doubled, from Rs. 553.32 million to Rs. 1,038.73 million due to (i) increased scope of works as compared to original plans, mainly in District Hospitals; and (ii) rectification of structural deficiencies discovered during the renovation. This caused delays in the phasing of the works; additionally, re-scheduling of works to ensure the continued functioning of facilities while renovation works were on-going caused further delays. Procurement of goods and services were delayed initially due to (i) unsatisfactory performance and expiry of contract period of the procurement agent after first year; (ii) a decision to undertake in-house procurement of ambulances and computers, for which the project did not have adequate expertise and capacity; (iii) delay in completing a detailed quantification of pharmaceutical needs for the second year; and (iv) frequent transfer of PDs, leading to delays in decision-making.
Reduction of user fees in UP: In 2003, user fees for the facilities were drastically reduced (from Rs. 8 to Rs. 1), which could have influenced higher OPD attendance subsequently.

Mid-Term Review and Reprogramming: The MTR was undertaken in November 2003, by when the project disbursed 23% and was about 2 years behind schedule. However, about 60% of the Credit amount was committed and Bank Management saw this as a promising sign. On the DO indicators, analysis of utilization data indicated that the targets set for increases in OP and IP utilization were not likely to be met; the project was not able to provide information regarding the utilization of services by the poor; and there had been a slight decline in institutional deliveries at project hospitals. The performance of CHCs was particularly of concern. The MTR recommended that the PMU focus on the quality of execution on the ground, and on achieving results in terms of better health outcomes for the population, especially the poor. Although there was no formal re-programming undertaken at this time, the implementation strategy for the next two years prioritized the following as per MTR agreement:
(i) Policy/legal issues that prevented adequate public health service provision;
(ii) Testing alternative schemes and PPP to ensure adequate staffing and service provision;
(iii) Health service provisioning to pregnant women, to reduce maternal mortality;
(iv) Integrated selected project activities within the Department of Health and Family Welfare (DOHFW) to ensure sustainability;
(v) Monitoring and evaluation of the effectiveness of project interventions.

Importantly, the MTR concluded that GOUP could move beyond the facility-based approach to a more comprehensive approach only if it developed a comprehensive health policy, which was still pending.

Project Extensions: The original project Closing Date was December 31, 2005. An IDA mission undertaken in August-September 2005 rated the project Unsatisfactory on both achievement of DO and IP; however, it commended GOUP on its concern for the lack of progress on achievement of the Millennium Development Goals (MDGs) and their desire to urgently re-structure the project so as to pilot alternative approaches to providing better basic services. The Aide Memoires also recorded that project outcomes as measured through the original PDO indicator 1 (i.e. outpatients, in-patients, percentage of women, institutional deliveries etc) was being negatively affected for reasons beyond the control of the project, such as frequent transfer of district officials, non-availability of doctors and Auxiliary Nurse Midwives (ANMs) etc. At the same time, important new developments in the health sector at the national level led to providing large additional funds through NRHM and the Reproductive and Child Health (RCH) II project to UP/UK as focus states. While retaining the same DO, the project shifted its emphasis to: (i) strengthening district level capacity for needs-based planning and evidence-based management of health services; (ii) developing successful health service delivery demonstration models with the potential to be scaled up, including those supported by the NRHM; and (iii) initiating affirmative action for targeting the poor by piloting direct interventions. This represented a shift from the "facility-based approach" to the "population-based approach", focusing more on measuring health outcomes rather than inputs. The project

anticipated an unutilized amount of US$24 million; the extension of 18-24 months was expected to utilize these funds to implement the new approach in 4 pilot districts. This period was also to be used to prepare a follow-on operation.

In the case of UK, the November 2005 IDA mission rated achievement of DOs as Satisfactory and IP as Highly Satisfactory. However, due to delayed start-up, about US$5 million remained unutilized; therefore GOUK had requested that they be given an extension to complete all activities and fully achieve the project's DOs. These included activities relating to (i) improving quality of health care; (ii) strengthening public health institutions at the state, district and block levels; (iii) initiating activities to ensure better access to service in remote geographic areas (included procurement of 13 mobile vans); (iv) transferring activities over to the Directorate for increased ownership and sustainability.

The first extension to the project was granted on December 28, 2005, for a period of initially one year; and based on achievement of specified milestones, it was to be extended for an additional year through December 2007.

Subsequent to the first extension till December 2006, a second extension of 12 months was applied for the project, largely to ensure the seamless transition into the follow-on project. It was expected that the new project would be ready for implementation by April 2008 since preparations have been underway since February 2007; however, due to the findings of the Detailed Implementation Review (DIR) of five other health projects in India[1], the project preparation was placed on hold for a number of months and hence there was a need to provide a second "bridging" extension to the project. The third extension was granted on retroactive basis on March 14, 2008, for a period of 12 months from January 1, 2008 to December 31, 2008.

2.3 Monitoring and Evaluation (M&E) Design, Implementation and Utilization:

M&E of both quantitative and qualitative aspects of the project were considered essential; project baseline indicators were established prior to Negotiations and annual, mid-term and final evaluations were built into project design. Project design included a comprehensive M&E system:

(i) *Health Management Information System (HMIS)*[2]: In UP, this component has been well implemented, despite many mid-course corrections. While it was earlier managed by the PMU, it was later transferred to the Neeti Nirdharan Prakoshth (the strategic planning unit set up under the DOHFW), an indication of the ownership of this activity by GOUP. Aide memoires consistently recorded their appreciation for efforts with regard to HMIS development, and the fact that this component had been taken up by the Directorate for scaling up across the state. In the extension phase, the PMU developed a web-based system which could be updated by district authorities as well as individual authorized staff. A comprehensive Personnel Information System (PIS) with information on over 10,000 Health Directorate personnel has already been entered; and the health and hospital management systems, and drug inventory system, are expected to be uploaded similarly. Modules for national programs (RCH, TB, Immunization, Malaria, Blindness, Leprosy and Integrated Disease Control) have been computerized and district program officers send monthly performance data through them to the respective Directorates. All this resulted in a much more ambitious HMIS than was envisaged during project preparation. In UK, data for allopathic doctors and paramedical staff has been entered into the PIS which could the basis for more rational and transparent postings and transfers. The HMIS has been rolled out at the district level

[1] The DIR was conducted on five health projects in India viz. Orissa State Health Systems, Food & Drugs Capacity Building, Tuberculosis Control, National Aids Control II and Malaria Control projects. Based on the findings of the DIR, all projects under implementation developed a Risk Mitigation Matrix to improve governance and anti-corruption measures.

[2] HMIS has often been used for Health Management Information Systems and Hospital Management Information Systems interchangeably in various documents (including Borrower's ICR for UK), possibly because of substantial hospital indicator content in the Health Management Information Systems. In the ICR, HMIS refers to Health Management Information Systems, unless stated otherwise.

based on software provided by the National Health System Resource Center, and is now expected to be extended to the block and sub-block levels. A Beneficiary Tracking System was field tested, but has faltered due to uncertainties regarding project extension. Equipment for a centralized data resource center has been procured, but this is yet to be operationalized.

In addition to the HMIS, Annual Performance Surveys (APS) were undertaken by an external agency in both states, to track the agreed indicators on the Performance Matrix agreed in the PAD. In UP, they were conducted regularly until 2005, after which they were discontinued due to a change in the process indicators agreed for monitoring DOs in the extension period. The subsequent APS was initiated in UP in the last year (2008-09) after the closing of the project. In UK, the surveys were continued into the extension period as well.

(ii) *Disease surveillance and control system.* This component was dropped, due to the launch of the Bank-funded Integrated Disease Surveillance Project at the national level;

(iii) *Financial Management System (FMS)* which would analyze financial information for decision-making and establish clear financial policies and procedures. The FMS in the PMU and three regional PMUs were generating and submitting Project Management Reports (PMR) through a computerized format from end-2004;

(iv) In addition, the project initiated M&E activities to address specific needs as they arose. Maternal Death Audits were initiated under the project due to the increased concern over continuing high levels of maternal mortality in the state. This activity has now been taken on by the Directorate of Family Welfare. An in-depth external evaluation has also been undertaken of the NGO outreach program implemented under the project. Both the UPHSDP and UKHSDP have undertaken annual evaluations of all NGO interventions under the project. The evaluations take into account all service parameters, and judge whether or not the NGO has been able to fulfill its Terms of Reference as specified in the contract. This system of external evaluation has been used to make decisions on continuing the services of each NGO; in UP, during the last round of evaluation, about 61 NGOs were disqualified for poor performance.

2.4 Safeguard and Fiduciary Compliance (focusing on issues and their resolution, as applicable):

Indigenous People: UP has a very small tribal population (0.2%), who are largely mainstreamed into the general population, and no specific special needs were identified by the Beneficiary Assessment. Hence, a separate Tribal Development Plan was not developed and the project was designed and implemented to address tribal populations through the access/outreach component (Component 2c). The project also focused overall on the poor, and the worst-off women through its concern with reducing maternal mortality, which would encompass poor tribal populations.

Environmental Issues: UPHSDP was a Category 'B' project as per Bank's Operational Policies. An environmental assessment had been undertaken during project preparation, based on which an Environment Management Plan (later termed the Health Care Waste Management (HCWM) Plan) was developed in 2003. This served as the basis for implementation and monitoring of HCWM activities under the project. After initial delays and slow implementation, the component activities picked up in late 2004 with the appointment of a dedicated PMU officer. In parallel, the scope of implementation was increased from 4 pilot facilities to cover all 117 facilities. Based on a cost-benefit analysis of different options, the GOUP decided in 2005 to implement HCWM through Common Treatment Facilities (CTFs) on a turnkey basis, i.e. outsourcing to service providers who would procure all necessary supplies and consumables and would manage transportation and final disposal at a contractual fee. A Public Interest Litigation against the Central Pollution Control Board (CPCB) in 2005 further delayed implementation and most of the activities were suspended, except some training programs, until legal clearance was obtained from the High Court in July 2006. A detailed field review in May 2006 found poor implementation of infection control and waste management practices within healthcare facilities and inadequate attention and awareness of associated risks of such bad practices. By October 2006, the PMU had outsourced the entire component and had started developing the institutional mechanism required for its coordination and the appropriate monitoring and reporting systems. Implementation continued satisfactorily, with scope for improvement. The PMU was proactive in establishing a coordination mechanism with the DMHS, PCB and other

stakeholders and instituting a mechanism for supervising HCWM activities across the state using students. The GOUP's vision in initiating the novel turnkey approach is commendable and the PMU officer's dedicated efforts in operationalizing this initiative is noteworthy.

The state of UK, with support from Bank, developed a state-wide strategy for Infection Control and Biomedical Waste Management, in addition to supporting HCWM in the project facilities. The state-wide strategy is expected to ensure further movement and sustainability of the efforts made under UKHSDP. Further, the state has engaged with GTZ for funding support under which they will start implementing this strategy.

Procurement: Due to lack of capacity at the PMU, the project used the services of procurement support agencies (PSA) for handling goods and works procurement right from the first year. This arrangement did not go very smoothly and for some period, the procurement was handled directly by PMU. Though in the initial years the procurement was more or less satisfactory, slowdown in procurement of goods (particularly in UK) and works (particularly in UP) were noted during 2002-03. By 2004, significant delays were noticed in procurement of goods in UP together with receipt of many complaints by the project. During the post review conducted by the Bank in 2006, problems were observed in the contracts issued by the procurement agent (HSCC) including significant delays in contract award. By the end of the year 2006-07, both UK and UP decided to stop using a procurement agent and handle procurement through internal capacity. The post reviews conducted by the Bank in 2007 (covering the contracts issued during 2005-06) came out with serious findings (although for a value of $28,000 only, for the UP component) including the indicators of collusion in some cases, which were mainly observed in procurement handled at district level. The subsequent post reviews covering the contracts for later years also came out with similar findings. Uncertainty over project closing date (during the period between application for extension and approval of the same) also contributed to reluctance of the project to hire additional procurement staff.

In the last years of the project, measures were initiated, as part of DIR risk mitigation plans, for increasing the transparency through disclosing the contract information on the web, strengthening the complaint handling, monitoring the district level procurement introducing procurement audits as part of internal audits, and procurement capacity building. It is desirable for the department to mainstream these reform measures so that health procurement system in the state can be improved on sustainable basis.

Financial Management: The project was implemented using a PMU, commercial banking channels and project specific financial management staff hired on a contractual basis. FM was rated as Moderately Satisfactory and the following points highlight lessons learnt and issues relating to the UP component of the project (a) inventory management was done using manual systems and validation between physical and financial information was not carried out regularly; overall focus on effective utilization of assets for project purposes was weak; findings suggesting that in some cases assets purchased were not put to use; (b) streamlining release of project funds could have been improved, by providing flexibility in spending within an overall budget ceiling for the implementing entity, instead of tying release orders to specific activities; (c) audit reports, focusing more on eligibility of expenditure for reimbursement rather than on overall certification of financial statements and issued by the independent supreme audit institution of India, Comptroller & Auditor General (C&AG), were delayed in some years; and (d) internal audit arrangements were not adequate.

For UK, the overall FM arrangements and accounting and record keeping were satisfactory. Maintenance of updated records and their submission were timely. The audit report for FY07-08 did not indicate major issues and the outstanding issues were addressed by the project. Internal audit was part of the project design and quarterly audits were conducted and the compliance made by the project. These reports and compliance were periodically shared with the Bank. In the penultimate year a special internal audit by a third party was carried out by the project that addressed validation between physical and financial information. Barring a few cases, most of the assets purchased were received and put to use, and issues highlighted to the management and the project authorities were addressed through corrective steps. Audit reports by the C&AG (independent supreme audit

institution in India) were delayed in some of the years, although this cannot be attributed to the project implementing authorities. The audit scope was mainly focused on eligibility of expenditure for reimbursement and not so much on overall certification of financial statements. However some key FM issues faced by the project were:
(a) The computerization of accounting system was limited and was largely centralized at the headquarters, although the original design intended to disseminate the practice to the districts;
(b) Physical verification of assets purchased in the project, inventory management and validation between physical and financial information could have been improved especially in the initial years;
(c) Staffing for accounting was an area of concern, due to the lack of a separate cadre in the department for this discipline. The issue needs to be looked into for long-term benefits in the department.

Quality Review: In response to concerns raised by the Detailed Implementation Review of the India Health portfolio, a review was commissioned by the ICR team to assess the quality of construction and maintenance of health facilities, on a sample basis and mainly for the high-value construction, together with an assessment of the adequacy and maintenance of equipment for the corresponding facilities under the UPHSDP and UKHSDP (UP and Uttarakhand Health Systems Quality Review of Civil Works and Equipment; September 2008). The review was based on site visits and information obtained at the sites. The report was shared with the GOUP and GOUK by the project team. Separate assessments were made for infrastructure and for medical equipment. The main findings of the review were:

In UP: *Civil works*:

- Quality of construction was satisfactory at most sites. The decentralized project management through Regional Project Managers has possibly contributed positively to this.
- Almost all the sites adhered to the drawings agreed with the Bank.
- Fittings were provided of good quality, and most carried Indian Statistical Institute (ISI) certification.
- Workmanship was, in general, found to be good in renovation works at existing facilities, although there were hindrances and delays during construction. However, workmanship could have been improved by closer supervision at newly constructed facilities.
- Quality Assurance procedures were found to be satisfactory by and large.

Equipment:

- Based on the available data and information provided by the PMU, equipment was found to be in accordance with the stipulated specifications of the purchase order, even though there were slight deviations from the original World Bank-approved specifications in the pre-tender stage in some cases.
- Most of the equipment was made functional within one month after delivery.
- Operations and Maintenance of equipment was not up to the mark in some places. In a number of locations some of the equipment were found to be non-functional or were operating without any appropriate maintenance system. Some equipments such as electrolyte analyzer, blood gas analyzer, 12 Channel ECG stress test machine, were found to be out of order for more than 2 years or had never been installed.

In UK: *Civil Works*:

- Quality of construction was satisfactory, but could have been improved with proper supervision by professional staff (including architects) and quality control during the construction.
- Fittings provided were of good quality; however, ISI certified door fittings were missing in some cases, where they were reported as stolen.
- Workmanship was satisfactory, but could have been improved during construction. Also, there was evidence of poor maintenance resulting in deterioration of structures
- In general, quality was found to be not up to standard as there was dampness even inside functional areas (including Operation Theatres), extensive fungus growth on interior walls of public areas, as well as settlement of some areas in new constructions.

- There was no documentation of Quality Assurance procedures having been systematically followed.

Equipment:

- Equipment was in accordance with the stipulated specifications of the purchase order.
- In general the equipment was found to be installed within reasonable time and in some of the facilities within one month.
- Most of the equipment were found to be in operation and regularly maintained as they were under warranty, except at the facilities located in remote areas where some equipment were non-functional as there was no appropriate manpower available.
- Equipment were found to be adhering to adequacy norms, except at the remote facilities, where some of the equipment are not in use / minimal use due to non-availability of appropriately trained manpower.

Contractors confirmed that payments were made, although approvals took a long time. Underestimation of costs at preparation led to cost overruns. The review team felt that the quality of work and decision making on site may have been improved by periodic visits of the professional architects to the facility during construction. Equipment Procurement Consultants felt that not enough attention was paid to quality control of equipment procured under the project. Training for government functionaries in procurement and contract management was found to be a crucial input in ensuring quality of both civil works and equipment.

2.5 Post-completion Operation/Next Phase (including transition arrangement to post-completion operation of investments financed by present operation, Operation & Maintenance arrangements, sustaining reforms and institutional capacity, and next phase/follow-up operation, if applicable):

Both GOUP and GOUK continue to be committed to improving the health of the poor by ensuring that they receive both preventive and curative care, and to achieving the MDGs for maternal and child health. Both states are in the process of preparing for the anticipated follow-on operations, building on the learnings of the pilot projects undertaken during the extension phase. The UP government has had a consultative meeting (September 28, 2006) with all development partners in the state, including European Commission, USAID, UNICEF, WHO, PATH and DfID to discuss options for a common strategic framework for implementation of the NRHM in the state to achieve the MDGs. Since then, both states have made progress with key activities, such as the Social Assessment and Equity Action Plans.

It was understood that the nature of the follow-on projects in both the states would complement NRHM support. It is expected that implementation of the follow-on operation will ensure continuity and sustainability of activities; and that many important initiatives of the current project will be taken on by a potential follow-on operation. The anticipated follow-on project for both the states would be designed based on tripartite agreement between the two state governments and the Government of India and would focus on system strengthening, policy reforms and innovation methods for service delivery.

3. Assessment of Outcomes

3.1 Relevance of Objectives, Design and Implementation (to current country and global priorities, and Bank assistance strategy):

The **objective** of the project was very relevant to the situation in the state at the time of preparation; and continues to be relevant to the state's current development priorities. UP continues to be among the poorest performing states on a series of health indicators; and while UK performs as well or better than the national average on key indicators, there is still much room for improvement:

Indicator India Uttar Pradesh Uttarakhand

Indicator	*India*	*Uttar Pradesh*	*Uttarakhand*
IMR	57	73	42
Institutional Delivery	41	22	36
TFR	2.7	3.8	2.6
Anemia in Children	79.2	85.1	61.5
Immunization Coverage	43.5	23	60

Source: National Family Health Survey III (2005-06)

GOI has recognized that unless improvements in health outcomes take place in these states, India is at serious risk of not achieving the MDGs. As a result, GOI has included both states in the Empowered Action Group (EAG) of states, which identifies them as poorly performing states with weak systems capacity to address pressing human development needs. The NRHM and RCH have a special set of interventions being implemented in these states, designed to enhance capacity and increase resources for accelerated action in the health sector.

Project objectives are in keeping with the latest CAS objectives (*India Country Strategy*, 2004) of focusing on the poorest states, such as UP. The CAS continues to support the objectives on which the project was based i.e. improving government effectiveness, investing in and empowering people, and promoting growth through partnerships with the private sector. In addition, the CAS emphasizes investments to meet the MDGs and focusing on outcomes, both objectives that the project adopted in the extension phase. The World Bank HNP Strategy (*Healthy Development*, April 2007) also focuses on improving health conditions for the poor and results on the ground, and particularly mentions a focus on health systems development, including provision of basic infrastructure, supplies and well-trained personnel.

Design: While no external evaluation of SHSDPs had been undertaken at the time of project preparation a Quality Enhancement Review carried out on July 31, 2002 to review the Bank's experience with the SHSDPs identified a set of issues with regard to the design of these projects that needed to be addressed in all future operations. Though the review was not specific to UP/UK, the findings that are of relevance are:

(i) The DOs did not explicitly identify improvements in health status as a monitorable outcome of the project. The focus was on monitoring project inputs and intermediate outputs;

(ii) Facilities in India do not routinely record the poverty status of patients mainly because of difficulties in identifying and tracking the poor. "Below Poverty Line" (BPL) cards are often not the best index of the poverty status of patients coming to public facilities and many poor patients do not possess such cards. Moreover, poor patients often come to public facilities without the BPL card, even if they possess one. This is further underscored by the fact that neither GOUP nor GOUK put in place a sound mechanism to measure the utilization of services at project facilities by the poor, citing operational difficulties. Therefore, unless a reliable mechanism of recording is devised and implemented in the states in India, tracking poor patients through existing systems would always be an issue in the projects;

(iii) Although the current project did go further in partnering with the private sector by contracting in doctors/specialists and NGOs, the objective of developing a comprehensive vision for the health sector involving all health sector partners is yet to be addressed, and should be a core activity of the follow-on project;

(iv) The fairly standardized design of the state health projects had served both the Governments and the World Bank well, especially in terms of efficiency, low overheads and, to some extent, in cross-fertilization among states. However, with the ever-widening differences among states such an approach was now much less justified. This has been widely recognized, and even within the context of the project an attempt was made during project restructuring prior to the first extension period to move away from the facility-based, input oriented approach to a population-based, outcome oriented approach. This was done specifically to address the overwhelming constraints in UP to delivering and accessing basic health care.

Implementation: Project design and implementation did address the capacity constraints in both states by limiting the scope of the project to those districts/blocks which were performing the worst and most in need of project interventions. Only selected interventions such as training and HMIS were attempted across the entire state. In addition, the project engaged with NGOs in areas where government capacity to deliver services was the poorest, in remote and tribal areas. After the major investments in infrastructure and equipment were largely completed in the initial project period, the scope of the project was further reduced to cover just 11 blocks in four districts, and extension phases have been used to test working alternative models of service delivery which are to be scaled up in the follow-on project.

3.2 *Achievement of Project Development Objectives including brief discussion of causal linkages between outputs and outcomes, with details on outputs in Annex 4):*

A set of indicators had been specified and agreed in the Results Monitoring Matrix to measure progress towards achievement of DOs. However, two of these indicators -- appropriate referrals from PHCs to CHCs and BH/CH and share of poor patients among outpatients and inpatients -- were never measured or monitored, as is customary with other states in India. Numeric targets for each of the other indicators had been established in the UPHSDP Performance Indicator and Target Grid (Table 8.4 of the PIP, July 2001). Data on service utilization was collected through an Annual Performance Survey (APS), based on a stratified random sample of facilities. Increased patient satisfaction of the poor and women was measured by successive Patient Satisfaction Surveys (discussed later). In UP, the APS was discontinued in 2005, since the indicators were changed for the extension period. As a result, during the extension period a different set of process indicators was measured in UP; however, there was no formal revision of the Results Matrix and the PDO was not changed. In UK, analysis of the original indicators continued until project closing. Some target values for UP were changed twice – first after the bifurcation of states in 2000 (for lesser population and districts) and then at MTR in 2003 after standardization of data (discussed later) and correction of baseline.

DO I. Improved health facility quality and efficiency, as measured at project facilities by: (i) increased outpatient visits overall, by women and by the poor; (ii) increased in-patients overall, by women and by the poor; (iii) increased bed occupancy; (iv) increased institutional deliveries; (v) increased patient satisfaction overall, by women and by the poor; and (vi) increased number of appropriate referrals from PHCs to CHCs and CH/BH.

Summary of achievement of PDO indicator 1: Improved health facility quality and efficiency

	UP (data until 2005)			**UK** (data until project closing)		
Indicator	**Target**	**Observed**	**Comments**	**Target**	**Observed**	**Comments**
Increase in OPD						
a. Overall (% change over baseline)	20	23	A yearly target was put for each of the years from 2000-2005. In 2005, the increase was 102% of the target for that year.	79.2	92.2	Overall cumulative annual growth rate was 8.5%.
b. Women (% of above that are women)	50	47.1	Total OPD for women increased by 16.5% over baseline	52	54.7	
c. Poor (% of poor in a)	-	-	Not recorded	-	-	Not recorded

Increase in in-patient admittances						
a. Overall (% change over baseline)	23	-1		59.1	89.4	
b. Women (% of above that are women)	50	60		64	68	
c. Poor (% of poor in a)	-	-	Not recorded	-	-	Not recorded
Increase in BOR (% increased over baseline)						
DH (M)	70	55.2		80	89.3	
DH (F)	60	58.9		80	99.7	
CHCs	50	18.1		50	41.8	
Increased institutional deliveries (% increase for deliveries which took place in a project health facility)	50	-14.5	Percentage increase / decrease over baseline numbers.	8.1	13.1	Compounded annual growth rate in percentages.
Increased patient satisfaction	Increase	Increased from 1.97 to 2.56 overall on a 4 point scale.	Parameters included availability of medicines, cleanliness of wards, behaviour of nurses and doctors	Increase	Remained static at 2.7 overall on a 4 point scale.	Parameters included availability of medicines, cleanliness of wards, behaviour of nurses and doctors
Increased number of appropriate referrals from PHCs to CHCs and CH/BH	Increase		Not measured	Increase		Not measured

Source: UPHSDP APS 2005 and UKHSDP APS 2008

A detailed discussion on the achievement of indicators is given in Annex 10. Some key points against some of the indicators are mentioned below.

Total Out-patients (OP attendance): In UP, user charges were drastically reduced in 2003, which lead to a huge increase in utilization of project facilities. Since this increase could not be attributed completely to the project, the utilization numbers were standardized to correct for the impact of reduced user charges. OPD figures, standardized to discount the effect of reduced user charges, met the targets set at all levels of facilities

In UK, total outpatient attendance grew by about 92% during the project period, and reached quite close to the end of project target in 2006 itself. The annual increase was higher at district level facilities (DH(M)s, DH(F)s and CH/BH) as compared to rural facilities (especially CHCs), due largely to issues related to manpower availability.

Women Out-patients: In UP, standardized numbers showed that total OPD attendance for women increased by about 16.5% over the project period, with greatest increases at the CHC and PHC levels, and significant decline at the DH(F).

In UK, the share of women in total outpatients increased from 47.8% at baseline to 54.7% in 2008, over the end of project target of 52%.

Total In-patients: In UP, the overall IP numbers did not meet the targets set for any of the project years. The shortfall can largely be attributed to lack of doctors in the facilities.

In UK, there was a steady increase in IP admissions over the project period at all levels of hospitals, with a CAGR of 8.31% overall. The overall CAGR value was higher in project facilities, except for CHCs, as compared to non-project facilities (source: APS 2008). When coupled with increases in BOR, the increase in IP indicators is quite impressive. The District Hospitals (Male/ Female) (DH (M) s and DH (F) s) have exceeded the end of project target, while the CHCs have come close to the target of 50% even if they faced paucity of doctors and nurses at the facilities.

Women In-patients: In UP, there was a slight increase between 2000 (baseline) and 2002 in the proportion of women in-patients from 57.2% to 58.4%; this was well beyond the target set, largely because the targets were unrealistically low (the end-of-project target of 50% was lower than the baseline)[3]. In UK, women in-patients constituted 68% of all in-patients, ahead of the end of project target of 64%.

Poor patients: As seen in other states of India, measuring poor patients was not done successfully due to problems in proper identification of the Below Poverty Line population.

Institutional Deliveries: In UP, although deliveries at CHCs and PHCs increased over the project period, this could not compensate for the significant shortfall at DH (F). The most likely explanation for this is the acute shortage of women doctors, particularly after the implementation of the Court Order on transfer of doctors.
In UK, institutional deliveries surpassed the end of project target. This was most likely due to the JSY incentive scheme, and indicates that the system was capable of responding effectively to increased demand that resulted from that scheme.

Bed Occupancy Rate (BOR): In UP, BOR declined across all project facilities between 2000-2005.

Patient Satisfaction Surveys (details in Section 3.6 and Annex 5 under Beneficiary Assessment discussions): To monitor and track improved access and quality of care to beneficiaries, four Patient Satisfaction Surveys (PSS) were conducted in UP between January 2002 and December 2005. Overall satisfaction with services received went up significantly from 1.97 to 2.56 o the 4-point scale.

In UK, six surveys were conducted in UK between January 2003 and May 2007. Overall satisfaction with services received has remained static across the period at about 2.7 on the 4-point scale.

[3] The baseline figures were revised in 2003 (at MTR), mostly in terms of the absolute number of outpatients and inpatients, from what was given in the Project Implementation Plan, because of bifurcation of the state and unrealistically high expectations. However, the APS shows that for indicators like share of women patients, the targets in terms of percentages were lower than that of the baseline in UP.

Increased referral: Referral data was never reported on in either state, in keeping with the practice followed in the rest of the country.

Although the project in UP was reoriented in the extension phase (2006-08), the end-line study for the corresponding activities was not completed by project closure. The APS (for all 28 project districts) was also discontinued after 2005. Hence, additional analysis has been undertaken for key facility-level indicators (original PDO indicator 1) in the 4 districts taken up during the extension phase. The details are presented in Annex 11.

DO II. Improved Health Sector Spending through (i) increased portion of GOUP revenue budget spent on health sector (plan and non-plan); and (ii) increasing shares of public sector health recurrent expenditures spent on non-wage operating costs.

Allocations to the health sector have fluctuated in UP, particularly between 2000 and 2005. More recently, GOUP has maintained its commitment increasing allocations to the health sector, and enhancing the share of the non-wage component in total expenditure. Subsequent to 2003-04, there has been an increase in both proportion of state budget allocated to health and proportion of the budget allocated to non-wage expenditures. At end-of-project, the values (2008-09) are 6.40% (compared to an end-of-project target of 6.5%) and 28.66% (compared to an end-of-project target of 30%) respectively. This trend has been maintained in the present budget of 2008-09 as well. Overall, in nominal terms, state expenditure on health grew by about 60%. It is important to note that the budgetary increases are in addition to the NRHM allocations.

In UK, actual expenditure increased from 4.44% of total government expenditures in 2005-06 to 5.09% in 2007-08. The budget estimate for 2008-09 is 4.85%. Total health expenditures have increased from INR 1,463 million in 2001-02 to INR 5,868 million in 2007-08. Capital expenditures as a percentage of total expenditures have increased from 6.13% to 35.72% in the same period.

3.3 Efficiency (Net Present Value/Economic Rate of Return, cost effectiveness, e.g., unit rate norms, least cost, and comparisons; and Financial Rate of Return):

While an end-of-the project analysis has not been undertaken, a comparison between project and non-project facilities has been discussed in detail in Annex 3, with limitations due to non-availability of a robust dataset throughout the project period[4]. The project facilities did better than non-project facilities on OPD in both states. In UP, the non-project facilities showed marginal increase in institutional deliveries while declining in project facilities, although annual growth rate was higher in the former. IPD also declined by 5% (2004-2005) in the project facilities while it increased by a marginal 1% in non-project facilities during the same period. In UK, the growth in institutional deliveries was significantly less in project facilities as compared to non-project facilities. Two probable reasons could be attributed to such results : disruption in normal services due to phased completion of civil works in the running facilities in both the states; and acute shortage of doctors in UP, especially in the project districts, which were mostly in the more backward areas.

3.4 Justification of Overall Outcome Rating (combining relevance, achievement of PDOs [GEO], and efficiency):

Rating: Moderately Satisfactory for UP; Satisfactory for Uttarakhand. Composite rating: Moderately Satisfactory

While several of the targets set for the project indicators have been met, in UP there are serious concerns with regard to the declining rates of institutional deliveries at project hospitals[5], and the availability of appropriate

[4] In UP, the data available was from 2004-05 while in UK it was from 2006-08.

[5] As per District Level Household Survey data through the national level Reproductive and Child Health Project, institutional deliveries in UP has increased to 24.5% in 2007-08 from 21.4% in 2002-04.

teams of personnel at the facilities. However, attempts are being made to address this issue both under the current project and in the follow-on. The reforms agreed with GOUP in the Policy Matrix also were not implemented well. In UK, although all project targets were met well in advance of project closing, the issue of lack of availability of personnel still persists. Unless this is addressed urgently, there is a serious risk of the gains made under the project being jeopardized. Certain reform actions in Policy Matrix (originally agreed by GOUP) like improving strategic planning and HR reforms have not been implemented. UP being the more populous state with higher allocation of the credit, the rating tends to be dictated by the performance of this state. Based on the above, a composite overall rating of "Moderately Satisfactory" is justified.

3.5 *Overarching Themes, Other Outcomes and Impacts (if any, where not previously covered or to amplify discussion above):*

(a) Poverty Impacts, Gender Aspects, and Social Development

A Beneficiary Assessment conducted during project preparation indicated that access of the poor to health services was inadequate. The project selected intervention sites based in part on poverty and access criteria. Baseline data were collected to specifically monitor this aspect, and innovative outreach schemes in partnership with NGOs were planned to address this need. In addition, key performance indicators were designed to collect data on utilization of services by the poor and women, so that this could be reported on regularly, and made an integral component of measuring progress towards achievement of DOs. Details of achievement on increasing access to women and the poor are available in Section 3.2 above.

Outreach Activities to Disadvantaged Populations: The project also implemented outreach activities for the disadvantaged in remote areas of both states in partnership with NGOs. An evaluation conducted by the Indian Institute of Management, Lucknow, of the UP interventions found that about 80% of families in the intervention area belonged to other Backward Classes, Scheduled Caste and Scheduled Tribes, and about 60% of the families were BPL. The purpose of the intervention was to provide a minimum intervention package (MIPS) of preventive and limited curative health services for underserved and remote areas, including first aid and referral services, communicable diseases, maternal and childcare, treatment of minor illnesses and behavior change communication An exemplary system was put in place to monitor this component, with regular external evaluations being conducted by a reputed institution, based on which the services of participating NGOs was either continued or terminated. It is proposed that the evaluation tool developed by the external agency will be used by the district administration and Health Department to monitor and evaluate facilities and initiate a quality improvement process. Approximately 2 million people who did not previously have access to services were benefited by this NGO outreach program, and it is expected that this activity will be expanded in the follow-on project.

(b) Institutional Change/Strengthening (particularly with reference to impacts on longer-term capacity and institutional development):

A Strategic Management Board and a Public Private Forum were formed under this project to contribute to policy development in UP. A Strategic Support Group was also constituted in both UP and UK to address key policy issues. However, for want of adequate technical support, these bodies did not turn out to be as effective as was envisaged. Establishment of a Policy Analysis Unit is a positive step and is expected to give dividends in future.

The PAD identified three "critical change levers" to tackle the systemic issues related to institutional strengthening: (i) leadership development through the establishment of an effective Strategic Management Board; (ii) strengthened staff appraisal and management information systems to drive performance improvement throughout the system; and (iii) using the transfer system as a way to reward performance. The first two objectives were partly met. The last objective was not met because of the transfer policy implemented for doctors having spent more than ten years in each district, in consequence to an order by the Hon'ble High Court of Uttar Pradesh. In UK, the dearth of doctors did not allow the project to utilize the transfer system effectively for rewarding performance. However, the capacity developed in the PMU in both states is expected to have a positive impact in the follow-on project (if done quickly i.e. before the PMU is dissolved). The project also focused,

mostly during the extension period, on a number of other institutional strengthening actions viz. Organization Review with a new proposed organogram, Human Resource Policy development, as well as incentive scheme pilot and district planning in four focus districts.

The project design team wisely decided to divide the entire state of UP in five Regional Directorates to implement the project. This appears to be a good decision with hindsight, especially for managing the civil works and procurement in the 107 facilities under the project.

During the first extension period, 4 pilot districts were selected for district planning, which was incidentally also a major requirement for the National Rural Health Mission. In UP, it is assumed that the experience of such planning in the project districts contributed to the planning exercise in non-project districts through the NRHM.

(c) Other Unintended Outcomes and Impacts (positive and negative):
N/A

3.6 Summary of Findings of Beneficiary Survey and/or Stakeholder Workshops (optional for Core ICR, required for ILI, details in annexes):

To monitor and track improved access and quality of care to beneficiaries, four Patient Satisfaction Surveys (PSS) were conducted in UP between January 2002 and December 2005; and six in UK between January 2003 and May 2007 (details in Annex 5).

The main findings of the surveys in UP are as follows:

- 71% of all patients had had diagnostic tests conducted at the facility; and between January 2004 and December 2005, the proportion of patients receiving all prescribed medicines in OPD increased from 55% to 73%. This proportion was lower in DH (F) s (62%) and PHCs (67%).
- 78% of in-patients had all required tests conducted at the facility, and those receiving all prescribed medicines went up dramatically from 20% in January 2002 to 51% in December 2005. Almost 45% of respondents identified availability of medicines as a key area for improvement.
- Perception of cleanliness of facilities (outpatients and in-patients combined) went up from 42.4% of respondents being satisfied in January 2002to 64.4% in December 2005. This could be ascribed to the upgradation of infrastructure, on-going maintenance program and contracting out of cleaning services.
- Overall satisfaction with services received went up significantly from 1.97 to 2.56 o the 4-point scale.

Overall trend analysis indicated no significant differences in key indicators of satisfaction between general population, poor and women patients. The same was true of doctors' behavior towards patients. A possible reason could be that most patients, even when not classified as BPL, belong to lower socio-economic groups, and hence are treated uniformly by the medical staff.

The main findings of the surveys in UK are as follows:

- Overall satisfaction with doctors' behavior increased from 59.6% in January 2003 to 75.6% in May 2007, peaking to 85.2% in January 2004. Satisfaction level recorded for poor patients followed a similar trend, reaching a marginally higher peak than overall in 2004.
- A matter of serious concern is that between April 2006 and May 2007, availability of all prescribed medicines overall had declined from 68.5% of all patients to only 57.6%. Availability was poorest at PHCs. Again, availability of medicines was identified as a key area for improvement.
- Overall satisfaction with cleanliness of hospitals and with services received has remained unchanged across the period at about 2.7 on the 4-point scale.

- 89% of in-patients had all tests performed within the facility; however, only 49% of patients reported receiving all prescribed medicines free of cost.

4. Assessment of Risk to Development Outcome

Rating: Moderate

Both GOUP and GOUK continue to be committed to enhancing health outcomes in their respective states; this is backed up by commitments made by GOI in important national programs such as the NRHM and RCH. Specifically:

Financial: Government allocations to health have also been increasing in recent years, which is likely to continue. Significant additional funds available from GOI through the NRHM and RCH have made provision for inputs such as drugs and infrastructure upgradation/maintenance to ensure that supply side aspects of health service delivery are well provisioned. Under the NRHM, Rogi Kalyan Samitis or patient welfare societies have been established at all facilities, from the District Hospital down to the PHC, through which funds collected as user charges and direct program grants will be managed to fund non-salary recurrent costs.

Technical: Piloting of initiatives under the current project has tested implementation models and methodologies, and yielded important lessons with regard to strengthening health service delivery and enhancing service utilization. It is planned that such successful interventions will be scaled up under the follow-on operation, and the government is committed to doing so in their PIPs. The learnings could also be beneficial for operations under the states' own resources in future.

Institutional: Experience gained by the PMU in both states should minimize delays in the follow-on project since officials are already familiar with Bank procedures. The capacity built within the project to manage and monitor PPPs will be supported by the NRHM and RCH projects, which also plan to promote PPPs, particularly for the contracting in of medical and paramedical staff to improve service delivery and for outreach in remote and rural areas through NGO services. Some of the best practices initiated under the project such as annual third-party evaluation of PPPs in UP and establishment of autonomous institutions in UK will be continued by the government after project closing.

Social: There has been an increased utilization of project facilities as measured by the facility indicators related to outpatient and in-patient attendance. However, the lack of a mechanism to measure utilization of facilities by the poor means that the state cannot assess the potential social risk. In addition, in both UP and UK, there is a significant shortage of doctors and other staff at all levels of facilities, particularly in the DH (F). Unless this situation is actively addressed, it could jeopardize service delivery at all fixed facilities; especially when outreach services are delivered through NGOs and given additional demands on the system for institutional deliveries due to the JSY scheme.

Political: Both the governments of UP and UK have prepared a follow-on operation for IDA funding which builds on the investments made under the current project. It is the intention of the follow-on project to scale up and extend many of the initiatives that have been piloted during the extension period of the current project down to the primary level. However, the follow-on project needs to be complementary to the NRHM support by GOI in these two states.

5. Assessment of Bank and Borrower Performance (relating to design, implementation and outcome issues)

5.1 Bank

(a) Bank Performance in Ensuring Quality at Entry (i.e., performance through lending phase):

Rating: Moderately Satisfactory

No formal Quality at Entry review was undertaken of the project. Overall, project objectives were consistent with state and country objectives, as well as with the CAS. The project team took on board the lessons learned in the implementation of previous SHSDPs such as ensuring that a project implementation team is in place, putting in place a strong HMIS and implementing measures to ensure availability of funds for non-salary recurrent costs. The project preparation team did focus on strategies in project design or in the policy content that could overcome some of the risks to implementation success that had been faced by those projects. Project management arrangements were agreed prior to Negotiations; as well as arrangements for financial management and audit. A detailed set of performance indicators was prepared and agreed with GOUP; and baseline data on these indicators was provided during Negotiations. However, there were significant delays in start-up due to lapses in preparation: (i) there was no functional PMU for almost a year after Effectiveness; and (ii) the civil works component could not start because the facility survey done during preparation was of poor quality and needed to be re-done.

(b) Quality of Supervision (including of fiduciary and safeguards policies):

Rating: Moderately Satisfactory
Supervision missions were held largely regularly, with a good mix of expertise, even though the Bank team was constrained to supervise two state projects having different issues with the budget allocated for one. DOs and implementation progress were reported on in detail in the aide memoires. Detailed benchmarks were agreed with the PMU to ensure that key actions were taken expeditiously. In addition to routine supervision/review missions, the Bank team facilitated bi-annual SHSP workshops, where various states shared their experiences in implementation, problem solving and innovation. The MTR did highlight issues of concern with regard to the achievement of DOs, and suggested specific remedies. However, an important opportunity to re-program the project was lost at that time; and the actual re-programming of the project was only undertaken towards the end of the project period. The project team should be given credit for being proactive around the time of original project closing in taking a critical look at project achievements so far, and developing a new approach to achieving project objectives. The extension period was used to test new interventions, and stimulate new thinking within GOUP/GOUK to addressing the most pressing challenges in the health sector in the respective states. The foundation for the follow-on operation was firmly established, and a smooth transition from the current project was addressed seriously by the team. Issues related to fiduciary and governance aspects raised by the Bank through DIR were taken on by the Team, and although this led to uncertainties in the lending program, the Team was able to retain focus on core technical issues while addressing the fiduciary aspects. The Bank team's due diligence to address issues flagged by the DIR report (such as monitoring of civil work completions, attention to NGO monitoring, procurement reporting, and monitoring of the risk mitigation matrix), especially in the last two missions, is commendable. Implementation Status Reports (ISRs) were filed regularly, and provided documentation and analysis on achievement of DOs and implementation progress. Manager's comments in the ISRs were mostly thoughtful, and provided the Task Team Leader with timely input on follow-up action.

(c) Justification of Rating for Overall Bank Performance:

Rating: Moderately Satisfactory

The Bank supervision team was able to bring the benefit of experience of implementing previous SHSDPs to the UP/UKHSDP. It was able to lay the foundation for the future by testing innovative interventions during the project period. The team was able to maintain focus on core issues of importance in both states, re-orienting the project in order to do so. The team assisted the government in staying on track and focusing on those aspects that would most significantly impact achievement of objectives. However, the project missed some key signals on the need to realign the UP (or the larger) component of the project at an early stage and waited till the later years to bring about the reprogramming, although without a formal restructuring. Delays in granting final extension after

the DIR by the Bank, although not in the control of the project team, resulted in discontinuity of some of the project interventions in the final years (e.g. NGO services) due to uncertainty in funding. In addition, rating as a tool for monitoring and influencing performance of the project during implementation, could probably have been used more effectively (the project was rated as unsatisfactory in 2004 for the first time). It appears that the lessons on realistic rating was learnt by the task team and was used more efficiently in the last few years of the project. Considering all these, the moderately satisfactory rating seems appropriate.

5.2 Borrower Performance

NOTE: When the government and implementing agency are indistinguishable, provide rating and justification only for Overall Borrower Performance.

(a) Government Performance:

Rating: Moderately Satisfactory for UP; Satisfactory for Uttarakhand. Composite rating: Moderately Satisfactory

The government performance in UP is rated ***Moderately Satisfactory***. Project preparation activities were delayed due to national elections and inability to get clearance from GOI for funds from Project Preparation Facility. Despite limited engagement of staff from the Directorate, the core preparation team was small and dispersed. For this reason, project preparation extended from May 1998 through January 2000, when appraisal was undertaken – a period of 20 months. At the time of appraisal, it was found that: (i) the PIP was adequately prepared; (ii) the procurement plan for the first year of the project was completed; (iii) baseline data on facilities performance and utilization by the poor was collected and analyzed; and (iv) a public-private forum on health had been established, with an initial agenda for action. The first years bidding documents for packages requiring prior review had been initiated; and the draft Financial Management Manual was close to being finalized. A draft Health Sector Development Policy Letter was also furnished to the Bank team for review. However, as has been mentioned above, the quality of the preparatory studies and surveys was not uniformly acceptable, and lead to substantial delays during implementation due to having to repeat them.

In UK, project government performance is rated ***Satisfactory***. Following the formal request for bifurcation of the project in January 2001, an assessment of readiness of GOUK for project implementation was undertaken by the Bank in August 2001. The mission found that: (i) the PIP for UK had been completed in consultation with the Bank; (ii) a PMU of core staff had been established to manage the project; (iii) necessary budgetary allocations had been made for the project; and (iv) civil works consultants for the first year's work program had been appointed. The state reiterated its commitment to establishing the Strategic Management Board, and activities envisaged under policy and strategy development had already been initiated.

(b) Implementing Agency or Agencies Performance:

Rating: Moderately Satisfactory for UP; Satisfactory for Uttarakhand. Composite rating: Moderately Satisfactory

Performance of implementation agency, primarily the PMU in UP, is rated ***Moderately Satisfactory***. The project has been characterized by implementation delays; and at the MTR, less than 20% of the Credit had been disbursed. These delays were the result of a combination of factors: (i) project management was not in place for almost 18 months after project Effectiveness, as a result of which key decisions were seriously delayed; (ii) preparatory activities were not adequate, and needed to be repeated; (iii) delays in the recruitment of a Procurement Support Agent lead to delays in the civil works program; (iv) frequent turnover of key officials (including Health Secretaries) and staff was a major impediment: the project had 10 Project Directors, several of them for just a few months.

Subsequent to the MTR, the project did demonstrate substantial proactivity in taking up the initiatives developed jointly with the Bank in terms of restructuring and revising the focus of project activities. The piloting of new initiatives earned a rating of Highly Satisfactory from the Bank team, and proceeded well. A large volume of

procurement of goods, equipment, works and services was undertaken and completed by project closing. The HMIS was developed in an exemplary manner and will be used across the state to manage health system related data. PPPs were also implemented in an exemplary manner, with a large number of NGOs contracted for outreach activities; and an external evaluation mechanism which could be termed a "best practice". However, uncertainties with regard to the follow-on operation had a negative impact on implementation near the end of the project, with attrition of staff as well as slow progress on key policy reforms (HR, strategic planning and food and drug regulation, for example).

Performance of the implementing agency, the PMU in UK, is rated ***Satisfactory***. Implementation progress was consistently rated as Satisfactory by the Bank team, and several times Highly Satisfactory. The PMU undertook many important policy and strategic initiatives, including (i) having "fixed day" services of specialists; (ii) integration of AYUSH as part of health service delivery; (iii) contracting NGOs, doctors and paramedical staff in difficult to reach areas; (iv) outsourcing of facility services such as catering, laundry, cleaning, waste collection and disposal; (v) reimbursement of medical costs to BPL families, including identification and issuing of Health Cards to such families; and (vi) granting autonomy to hospitals in respect of management of utilization of funds and personnel. Progress on policy development was also good due to timely inputs: a comprehensive health expenditure review has been carried out; as also benefits incidence analysis for the health sector. In addition, studies on village health planning, organizational development, performance appraisal, and social assessment have all contributed to policy development for the future. In spite of frequent turnover in leadership at the PMU towards the end of the project, which resulted in slippage in the achievement of agreed benchmarks at times, the overall performance of the PMU was satisfactory.

(c) Justification of Rating for Overall Borrower Performance:

Rating*:* Moderately Satisfactory for UP; Satisfactory for Uttarakhand. Composite rating: Moderately Satisfactory

SHSDPs are complex operations, involving a range of hardware and software components. In a low capacity state such as UP, this was a particularly challenging prospect; and the changes in government due to bifurcation of the state and subsequent elections added to the complexity. Despite this, the projects were implemented largely as planned; new initiatives were successfully completed; and the government was engaged in a long-term dialogue with the Bank on the strategic future of the health sector in both states.

6. Lessons Learned (both project-specific and of wide general application)

During Preparation

Quality at Entry of the project could have been substantially improved by *better oversight of preparatory studies*. The initial facilities survey, which determined the scope and costs of the civil works program needed to be repeated since the initial survey was done poorly perhaps due to funding issues at the preparatory stage.

- Project design should confine itself to interventions that can be controlled and implemented by project authorities. Political decisions like government financing of the health sector and transfer and postings of staff should either be avoided or have stringent monitoring mechanisms in place tied to disbursements in order to be effective.
- User fees do contribute vital resources towards non-salary recurrent costs that can make a substantial difference to the quality of care at hospitals. However, stipulating annual recurrent increases in user fees to the point of making them prohibitively high is counter to project objectives. Especially when mechanisms to exempt the poor are not in place, the user fee policy needs to be carefully monitored to ensure that it does not become a further barrier to access to services for the poor.
- Ensuring readiness for implementation is vital. In a project that has a large volume of procurement of goods and equipment, this means that all drawings, technical specifications, procurement plans and, if necessary, a Procurement Agent with adequate experience, are ready and in place before Effectiveness. In the absence of this, initial delays are inevitable.

- Performance indicators should be designed with focus on measurability. Designing a simple yet comprehensive monitoring system that focuses on key outcomes based on the greatest health needs of the population is essential. The Results Matrix should contain a small list of key indicators, which are quantifiable and amenable to regular measurement. Any changes in indicators should be clearly thought out to ensure that they reflect the DOs adequately, as well as measure and track implementation progress.

During Implementation

- Maintaining continuity of staff is essential. Frequent changes of leadership and turnover of staff, both in government and Bank team, are detrimental to implementation. Continuity of activities and ideas is essential; as well as building upon previous initiatives and working according to an agreed strategy. New staff take time to familiarize themselves with the team and project activities; and often introduce changes that could be disruptive.
- Ensuring availability of skilled staff is necessary to attain project objectives. Shortages of staff at various levels of facilities or unavailability of the appropriate skill mix can nullify the impact of improved infrastructure and equipment. If adequate staff are not available, then contracting in skilled manpower can ease the crunch; care needs to be taken that the compensation package offered to the contractual staff is attractive enough to fill up the vacant posts. This is a recurring constraint in the implementation of Bank-supported HNP projects and deserves far greater attention from staff at entry.
- Allocating equipment to facilities based on availability of manpower. Instances of equipment (e.g., operating tables, ventilators) not being used in facilities because of lack of availability of surgeons, are common. A window of opportunity is always present during the early stages of implementation to revise allocation of equipment to facilities as per their utilization potential.
- Establishing a strong HMIS is critical for good management. The system needs to be simple and user friendly, focusing on a few key indicators. Most importantly, a feedback mechanism is necessary, whereby hospital administrators get regular comparative evaluations of their performance.
- Phasing in of civil works needs to be considered, understanding that (i) the larger works will take longer to complete; and (ii) that service delivery in running facilities should be disrupted as little as possible while civil works are on-going, backed by a handover plan and shifting of services to other zones temporarily as required, for each of the facilities.
- Allocation of adequate maintenance funds backed by a flexible maintenance policy. Budget allocation for maintenance activities and a flexible maintenance policy (for facilities of different sizes and areas) are imperatives for upkeep of infrastructure and subsequent service delivery..
- The project should allow for the piloting of innovative schemes. Care should be taken to develop a robust data collection plan, so that useful lessons can be drawn from the pilot; otherwise it will be a lost opportunity. In addition, the pilot should be initiated and completed early enough in the project cycle to allow for scaling up within the project period, with initial resources required for the scale-up from the project that can be sustained from government resources or a follow-on operation after project closing.
- Implementing a HCWMP is a requirement of GOI. Constant re-training and re-sensitization are required, since it involves basic behavior change on the part of all hospital staff. A long-term strategy for such re-training needs to be part of the HCWMP.
- Allocating appropriate supervision budget for the Bank team is crucial. Especially for a single project covering multiple states, lack of adequate supervision budget for the Bank's task team can be a bottleneck in supervision.

For Future Operations

- Issues surrounding health systems development are longstanding, and sustained effort will be required to address them. Developing systems that provide quality care to the poorest involves a multi-dimensional approach. There needs to be investment in strategic planning, human resources, partnerships with all available resources in the health sector, technical capacity and other socio-economic and cultural factors that impact demand for services. The approach taken during the preparation of the follow-on operation is

encouraging in that it has brought all donor partners to the table, to have a coordinated response to the needs of the states of UP and UK. In addition, due to increased funding by NRHM to Indian states, new projects need to take a holistic approach instead of a piecemeal one, looking at the entire set of interventions focused on improving health indicators in the state and funded by multiple sources, to attain the biggest benefits. On the institutional side, the Project Management Units (PMUs) created for Bank projects get dissolved at the end of the projects; thus rendering the expertise built through the years unusable post-closure. A long-term involvement through appropriate lending instruments is imperative to ensure stability and sustainability of institutions and capacities built during the project period.

- Use of alternative lending approach like the multi-phase Adaptable Program Loan (APL) could be a better way to address long-term policy changes and implementation systems in the projects. As observed in other state health projects in India, the initial period of about two years are required by the project to complete preparatory activities before commencing the service delivery phase. Moreover, pressure of disbursing often compels project authorities and the Bank team to focus on big-ticket procurement items like civil works and goods, rendering the "soft components" like M&E, IEC, Organizational Development etc. as issues of second priority. It is hence felt that a formal "system strengthening phase" with 15-20% of the total project budget be allocated in the first two years, with provision of moving on to the subsequent "service delivery phases" against trigger indicators marking a strengthened system and procedures. An early restructuring is key to successful completion of projects. Lessons learnt from the UPHSDP/UKHSDP as well as other projects which closed in the last few years, indicate that an early restructuring is inevitable to ensure a satisfactory completion. This is especially true when substantial revision of the PDOs or realignment of the indicators is required. Moreover, ambitious design and allocation of project cost often needs to be revised earlier on to prevent funds remaining unutilized at the end of the project period (the project had unutilized credit of approximately SDR 6 million).
- Shifting from building infrastructure and facility focus to building systems for service delivery takes time. Within the project period, shifting focus from facility-level improvement and building infrastructure to building systems for better service delivery requires time for adjustment and preparation. The UPHSDP project tried this in the last three years and met with partial success.

7. Comments on Issues Raised by Borrower/Implementing Agencies/Partners

(a) Borrower/implementing agencies:
Uttarakhand commented on the draft ICR that the projects in UP and UK should have been assessed separately in different ICRs for the following reasons: (a) separate Project Agreements were signed by UP and UK under a single IDA credit; (b) separate project implementation plans were prepared by each state focusing on different interventions and dimensions; (c) supervisions missions recorded performance of each state separately; and (d) it is not fair to give a composite rating to the projects with more weightage given to UP for its larger population, since performance of Uttarakhand was consistently better.

The ICR team appreciates the point but since both state projects were implemented under a single IDA credit, as per rules the ICR had to discuss the performance of both the states together. The ICR team has put in every effort to clearly reflect the performance of each of the states, with separate ratings and their rationale, where applicable. UK's better performance has been discussed in every relevant section of the ICR in as much detail as possible. However, as the Bank considers this one project, while an imperfect solution, the team concluded that as UP is the more populous state and had a higher allocation of the IDA credit, the composite rating gave more weight to that state's results. Subsequent multi-state projects will continue to experience this awkwardness.

(b) Cofinanciers:
N/A

(c) Other partners and stakeholders (e.g. NGOs/private sector/civil society):
N/A

ANNEXES

Annex 1. Project Costs and Financing

(a) Project Cost by Component (in US$ million equivalent)

Components	Appraisal Estimate (US$ million)	Actual /Latest Estimate (US$ million)	Percentage of Appraisal
1. Policy Reform, Management Development and Institutional Strengthening			
A. Developing a Strategic Management Capacity	0.71	**0.56**	**79.31**
B. Strengthening Performance, Accountability and Efficiency	12.18	**1.85**	**15.16**
C. Building Implementation Capacity	15.01	**15.43**	**102.8**
2. Improving Health Service Quality and Access			
A. Improving Clinical Service Quality	68.04	**56.96**	**83.71**
B. Improving Public Health Service Quality	16.62	**2.11**	**12.67**
C. Improving Access to Health Services	2.68	**8.06**	**300.73**
Total Baseline Cost	**115.24**	**84.96**	**73.73**
Physical Contingencies	**10.27**		
Price Contingencies	**2.07**		
Total Project Costs	**127.58**	**84.96**	**66.59**
Project Preparation Facility (PPF)			
Front-end fee (IBRD only)			
Total Financing Required	**127.58**	**84.96**	**66.59**

(b) Financing

Source of Funds	Type of Financing	Appraisal Estimate (US$ million)	Actual/Latest Estimate (US$ million)	Percentage of Appraisal
GoUP/GoUK		17.58	13.57	77.19
IBRD/IDA		110.0	84.83	77.12
[Donor A]	[WB-administered TF]	N/A	N/A	
[Donor B]	[Parallel financing]	N/A	N/A	

Annex 2. Outputs by Component

Status in UP	Status in UK
Component 1: Policy Reform, Management Development and Institutional Strengthening[6]	
Subcomponent 1: Strategic Management Capacity	
• A Strategic Management Board and a Public-Private Forum established initially undertook some key studies, but did not have the necessary technical support for policy analysis and strategic planning to realize their full potential. In the extension phase, a Policy Analysis Unit (Think-Tank) was set up to undertake regular analysis of health policy issues, which completed several studies and provided recommendations. • An Organizational Development study was undertaken as well as a HRM policy review. • Several of the preparatory activities for the follow-on project were completed, and there was some progress on preparing a detailed PIP for the project.	• Project management was strengthened by a (i) Strategic Support Group; (ii) Project Governing Board; (iii) Project Steering Committee; (iv) Procurement Committee; and (v) Project Management Unit. • An Organizational Development study was conducted and a new organogram developed for consideration of the State Government. • Prompted by the recommendations of a World Bank commissioned study, GOUK has prepared a road map for establishing a procurement and supply chain management system in the state. • A Clinical Regulation Act has been prepared, and a draft policy submitted to directorate for further action.
Subcomponent 2: Strengthening Performance, Accountability and Efficiency	
Health Management Information System (HMIS): Modules for National Programs (RCH, TB, Immunization, Malaria, Blindness, Leprosy and Integrated Disease Surveillance) have been computerized and are regularly used by district program officers for data management. In addition, the state has deployed a (i) *Personnel Information System (PIS)* to monitor the human resource activity in the department of medical and health; (b) *Hospital Information System (HIS)*, of which three modules (out-patient registration, medical stores, and single-payment window) are functional. Implementation was stalled in the Extension Phase; (c) *The Beneficiary Tracking System (BTS)* has been partially piloted with the household survey completed and the data being updated; (d) a web-based *Financial Management Information System* to monitor the budget allocation at the district level under different schemes.	*Health Management Information System (HMIS):* The PMU customized software which is now being used to report RCH II data from the 13 districts. In addition, a PIS has been developed, with most of the personnel information already entered; this has to now be regularly used for personnel management. *Quality assurance (QA)*: The fourth QA survey was completed in October 2008. Quality Improvement Teams have been set up at all project facilities and strengthened. Patient satisfaction surveys have been conducted regularly. *Below Poverty Line (BPL) Health Cards and Reimbursement:* The project has taken significant steps to ensure that 621,000 BPL Health Cards, prepared and distributed to each block Primary Health Care Center are reaching the beneficiaries. *Hospital Autonomy and Retention of 100% user fee:* Most facilities above the PHC level now have patient welfare societies which receive grants from the government for patient welfare and are also retaining 100% of user fees at their level.

[6] The sub-component 3 viz. "Building Implementation Capacity" (also called "Project Management in Annex 3 in PAD), meant to establish PMU (in both states) and regional directorates for overseeing civil works (only in UP), was not reported on in Aide Memoires from 2005. The sub component was meant to finance minor civil works, equipment, operational costs, salaries, training etc. The capacity was assumed to be built by 2005 since PMUs were established and a substantial portion of civil works were completed.

Component 2 (US$97.40 million): Improving Health Service Quality and Access	
Subcomponent 1: Improving Clinical Service Quality	
Civil Works: All civil works under the original project (107 facilities, 239 garages, 117 waste storage rooms and 4 regional training centers) and first extension (small works up to 10 million in 4 focus districts plus maintenance of UPHSDP renovated facilities) have been completed and the contracts, except for 4 under arbitration, have been closed. The project undertook a comprehensive internal assessment of all its original 107 facilities in October 2008. Major observations of this review are reported in Section 2.4 of the ICR. *Maintenance of Renovated Facilities***:** The infrastructure module has been designed for maintenance data base of the facilities. The module is web enabled and uploaded. The facilities renovated under the Project are being maintained by the Project through its Engineering Cell with the help of DPMUs in the districts. *Drug Procurement*: The Essential Drug List was revised based on a review of utilization of drugs at project hospitals. Separate Model Bidding Document for Procurement of Equipments and Drugs were prepared, but are awaiting government action to make them operational. *Equipments Repair & Maintenance*: A database of all the equipment available at the project districts has been prepared, and is being used for carrying out routine maintenance. The state government has recently allocated a budget for this purpose. The PMU team undertook a detailed review of all equipment provided under the project (see Section 2.4 of the ICR).	*Civil Works*: Renovation and refurbishment of facilities was completed in 36 facilities and 1 remaining work is to be completed soon. The Project has reviewed 27/31 facilities renovated under the project and prepared a report on the findings and actions taken (see Section 2.4 of ICR). The PMU has taken action by asking the concerned CMOs and CMSs to take necessary action based on the findings of the review *Equipment:* The Project reviewed all equipment provided under the project (see Section 2.4 of the ICR). *Equipment and Civil Works Maintenance Policy*: A comprehensive policy for maintenance of equipment was prepared in 2004 and a similar policy for maintenance of civil works was finalized in 2007. While these policies have been sent to the government for approval they are yet to be approved.
Subcomponent 2: Improving Public Health Service Quality	
Bio-Medical Waste Management (BMWM): Although HCWM activities have been implemented under the project, there continue to be major issues observed in the working of waste management practices was the improper segregation of the biomedical waste, besides lack of use of needle destroyers, lack of training in waste management. Common treatment facilities (CTF) CTFs are collecting the waste within 48 hours, as per the contract condition. CTFs have been able to capture up to 60% private health facilities for BMWM. However, the BMWM function has not yet been mainstreamed into the Directorate; and no separate BMWM cell has been established in order to ensure sustainability of	*Bio Medical Waste Management (BMWM):* A site specific BMW plan developed for 34 health facilities. Standard Operating Procedures (SOP) and awareness materials were developed and disseminated. On-site training on BMWM was given at each project facility. Deep burial pits were constructed at project sites, and equipment and supplies were procured and supplied to all facilities. More initiative needs to be taken by GOUK to institutionalize this activity to ensure sustainability. *Health Communication:* Information Education and Communication (IEC) activities were also

this important activity.	implemented under the project. These included: (i) Multimedia campaign on Safe Drinking Water and Smile Train Project; (ii) Evaluation of campaign on Safe Drinking Water by a third party; and (iii) Behavior Change Communication pilot in 2 districts.
Subcomponent 3: Innovative Schemes for Disadvantaged Population	
Improving Access to Health Services: The NGO program began in 2004 and much has been learned by the PMU on contracting of NGOs and PPPs. 169 NGOs worked in 28 districts, providing basic health care services to a total population estimated at 1.25 million. Sustainability of these services is an issue of serious concern, particularly since these are services that are being provided to the poorest and most disadvantaged communities in areas where public health care services are not available. The external evaluations of NGOs carried out by IIM, Lucknow, have shown that they are effective in: (i) improving health seeking behavior; (ii) increasing ANC visits; (iii) increasing institutional deliveries; (iv) increasing breast feeding of infants immediately after birth; (v) increasing immunization of children 0-12 months; (vi) helping reduce maternal and child mortality; and (vii) increasing birth registration. In addition they provide curative treatment for common ailments. *Innovative experiment of handing-over health facilities to non-public sector:* This activity has been transferred to the NRHM and to contract out District Hospitals and CHCs in clusters in several districts.	*Maternal Death Audits*: The Directorate has appointed the Joint Director in charge of RCH as nodal officer responsible for collecting and analyzing maternal death audit reports. *Integration of AYUSH[7] with Modern Systems of Medicine:* The project has also published 3 issues of AYUSH Journal and one booklet on Doon Hospital, Dehradun; and organized a workshop on Traditional Practitioners and their practices. *NGOs:* The project has involved 3 NGOs in the provision of primary care services in remote areas. These NGOs are providing services to a combined population of about 150,000 in areas of the state where the public health services have not yet reached. These activities have now been transferred to the NRHM, to ensure sustainability. *Mobile Health Vans:* 13 mobile health vans have been procured under the project and handed over to the Directorate. *Village Health Planning:* Steps have been taken to initiate the preparation on Village Health Plans, a key NRHM activity.
New activities taken up during the extension period (only in UP)	
• Preparation of District Action Plans in the 4 selected districts, even prior to the requirement of the NRHM. • Piloting of voucher scheme for BPL families to cover ante natal care and delivery services including management of complications, certain child health conditions requiring secondary and tertiary care, and emergency care including emergency transport. • Preparatory activities for health insurance scheme. • Hospital accreditation*:* Quality Council of India was contracted to guide several hospitals to achieve National Accreditation Board for Hospitals standards. The NABH has granted RML Hospital, Lucknow, a level 2 accreditation to the hospital, a first for a public sector hospital. • AYUSH Doctors working at PHCs and CHCs have been trained for national programs. • Preparatory activities for Community Mobilization for Action have been initiated by discussing the way forward with stakeholders and developing standard tools and methods.	

[7] AYUSH stands for the family of Indian system of medicines viz. Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy

Annex 3. Economic and Financial Analysis (including assumptions in the analysis)

This section attempts to examine if the facilities with project intervention performed any better than facilities with no project intervention.

Uttarakhand

In Uttarakhand the performance has been measured in terms of 3 keys outputs: OPDs, IPDs, and institutional deliveries. An aggregate performance of all project facilities compared to that of non-project facilities, were looked at as separate groups.[8] The comparison has been made in terms of compound annual growth rate (CGAR) from 2006 to 2008 (extension phase beyond original closing date) in each of these outputs. Since the number of project facilities is different from non-project facilities, the comparison of the absolute numbers of OPDs, IPDs, and institutional deliveries would be incorrect.

One message that emerges from the analysis is that the improvement in performance of project facilities was not uniformly better than that of non-project facilities. In terms of OPD utilization and IPD admittance, the project facilities performed better than the non-project facilities but the same cannot be said for the institutional deliveries. Phased handover of civil works in project facilities resulting in disruption of services could be one of the explanations for such results.

Growth in overall OPDs in project facilities is higher (8.17%) than in non-project facilities (5.46%), mainly driven by higher increases in utilization at PHC, CHC, and Combined/District hospitals. However, at the level of district hospital, the growth in OPDs at project facilities is somewhat lower than in non-project facilities.

Growth in overall IPDs in project facilities is also higher (13.87%) than in non-project facilities (9.74%). However, unlike in OPDs, a higher growth in IPDs in project facilities is mainly explained by higher rates of utilization at higher level facilities i.e., at combined/base hospital and above. At the level of CHC, the growth in IPDs at project facilities is in fact lower (18.8%) than in non-project facilities (23.5%).

Growth in overall institutional deliveries in project facilities is significantly lower (24.4%) than in non-project facilities (38.6%).

Uttar Pradesh

In Uttar Pradesh, the number of project facilities included in the study sample is the same as the number of non-project facilities at each level.[9] However, the data for the non-project facilities is available for two years only i.e. 2004 and 2005. Therefore, the performance is measured mostly in terms of growth rates but for district hospitals, both male and female, performance is also in terms of the differences in the "levels" (absolute numbers) normalized to population as these hospitals are all from different districts. The findings below pertain to the sample which is more or less "balanced."

As in case of Uttarakhand, the performance of project facilities vis-à-vis non-project facilities has been mixed. **The sample project facilities performed better in terms of *increase* in OPD utilization but not so in case of inpatient admittance. However, the incidence of use of OPDs and IPDs were generally higher in project facilities than in non-project facilities. Likewise, the share of women both in total OPDs and IPDs was**

[8] There were a total of 59 health facilities available in the State, including the DHMs, DHFs, CHs/BHs, CHCs and PHCs. Out of these, 34 health facilities were being covered under the project, and all the remaining 25 facilities were selected as the "control sites" i.e., non-project facilities.

[9] The sample included 6 district hospitals male, 6 district hospitals female, 6 CHCs and 6 PHCs – each from "project" facilities and from "non-project" facilities.

higher in project facilities than in non-project facilities. In terms of institutional deliveries too while the project facilities had higher incidence of use of deliveries, the annual rate of increase in institutional deliveries between 2004 and 2005 was negative for project facilities whereas the non-project facilities showed a marginal increase. Apart from disruption in normal services due to phased handover of civil works in project facilities, the fact that the project facilities were located mostly in backward districts could have resulted in higher levels of non-availability of doctors as compared to their non-project counterparts. However, conclusive data was not available to substantiate this hypothesis.

In total OPDs, project health facilities performed better than non-project facilities for the period covered in the sample. The overall growth in OPDs in the project facilities was higher (6.8%) than in the non-project facilities (4.7%) between 2004 and 2005. District hospitals in the project had higher utilization of outpatient services (10.6 per 100 individuals in 2004) than the non-project facilities (8.9 per 100 individuals in 2004). Moreover, the share of women receiving outpatient care has remained consistently higher in project facilities (45.1% and 46.9% of total outpatient utilization in 2004 and 2005 respectively) as compared to the non-project facilities (43.4% and 44.6% for the same years).

In terms of growth in IPDs, project facilities performed poorly as compared to non-project facilities between 2004 and 2005. Overall, there has been an almost 5 percent decline in the total number of IPDs in project facilities whereas non-project facilities registered a marginal increase of around 1 percent in IPD cases during the 2-year period. A comparison of levels of IPDs in district hospitals (both male and female) for any given year suggests that project hospitals performed slightly better (7.0 and 6.7 cases per 1000 population during 2004 and 2005 respectively) than non-project hospitals (5.8 and 6.0 cases per 1000 population during 2004 and 2005 respectively). Disruption in normal functioning of the UPHSDP facilities due to renovation/strengthening of physical infrastructure could perhaps be the reason for almost no growth in IPDs there.

In terms of the share of women in total IPDs in any given year, project facilities performed somewhat better than non-project facilities. The share of women in total IPDs in project facilities was higher (62% and of the total in 2004 and 2005) than that of non-project facilities (57% and 55% of the total in 2004 and 2005 respectively). However, between 2004 and 2005, there has been no meaningful change in the share of women inpatients in project facilities while this share registered a decline of almost 2 percentage points in non-project facilities.

Regarding institutional deliveries, project facilities registered higher deliveries than non-project facilities. Bulk of deliveries occurred at district hospital female. Project district hospitals (female) on average registered 89 cases per 100,000 population than non-project facilities that registered an average of 56 per 100,000 population. However, between 2004 and 2005, project health facilities have not performed as well as non-project facilities. Overall, there has been an almost 9 percent decline in the total institutional deliveries in case of project facilities compared to a marginal decrease of around 2 percent in the case of non-project facilities.

The average bed occupancy rates (BORs) in 2004 and 2005 in the project facilities across all the three levels is higher compared to BOR in non-project facilities.

On diagnostic services, the performance reflects no difference. For example, in terms of the number of haematology tests conducted per 100 patients between 2004 and 2005, project facilities have performed better than non-project facilities. However, in terms of the number of X-rays conducted per 100 patients, over the same period, non-project health facilities have performed marginally better.

It is important to note that the above differences in performance between project and non-project areas are valid only for a limited period for which data is available and not for the entire project life. These differences may perhaps be higher if data were available for the entire project life. Also, in the absence of robust dataset one cannot rule out the possible effect that intervention may have had on the performance of non-project areas.

Annex 4. Bank Lending and Implementation Support/Supervision Processes

(a) Task Team members

Names	Title	Unit	Responsibility/ Specialty
Lending (*The system pulls from Task Team in PAD Data Sheet, if any*.)			
David Peters	Senior Public Health Specialist	SASHD	
Tawhid Nawaz	Principal Human Resources Specialist	SASHD	
Nina Anand	Team Assistant	SASHD	
Kevin Brown	Management and Institutional Specialist		
Mam Chand	Procurement Specialist		
Sadia Chowdhury	Senior Public Health Specialist	SASHD	
Sara Gonzalez Flavell	Senior Legal Counsel		
Rie Hiraoka	Social Scientist		
Pradeep Kakkar	Communications Management Specialist		
Preeti Kudesia	Public Health Specialist	SASHD	
Rajat Narula	Financial Management Specialist		
David Porter	Biomedical Engineer		
Shreelata Rao-Seshadri	Social Scientist	SASHD	
Robert Remis	Disease Surveillance Specialist	SASHD	
Vijay Rewal	Architect	SASHD	
Maj-Lis Voss	Operations Analyst		
Abdo Yazbeck	Health Economist	SASHD	
Supervision (*The system pulls from Task Team Members in all archived ISRs*.)			
Vikram Rajan	Health Specialist	SASHD	Last Team Leader (until closure)
GNV Ramana	Lead Public Health Specialist	SASHD	Ex-Team Leader/member
Gerard Martin La Forgia	Lead Health Specialist	SASHD	Overall guidance/ review

Snehashish Rai Chowdhury	Operations Officer	SASHD	ICR TTL and Primary Author
Nina Anand	Program Assistant	SASHD	Team support
Shreelata Rao Seshadri	Consultant/ Social Scientist	SASHD	Data analysis, co-author of multiple sections and overall support to ICR TTL.
Rajeev Ahuja	Health Economist	SASHD	Economic analysis in ICR
Onika Mahajan	Team Assistant	SASHD	Team support
Elfreda Vincent	Program Assistant	SASHD	Team support
Mohammad Khalid Khan	Program Assistant	SASHD	Team support
Ruma Tavorath	Sr. Environmental Sepcialist	SASDI	Environment - UP
Meera Chatterjee	Sr. Social Development	SASDI	Social Assessment/ safeguards
Anupam Joshi	Environment Specialist	SASDI	Environment - UK
Arun Kumar Kolsur	Procurement Specialist	SARPS	Procurement - UK
S. Krishnamurthy	Financial Management Specialist	SARFM	Finance - UK
Birte Holm Sorensen	Consultant	SASHD	Ex-TTL/ consultant
Maria Andersen	Consultant	SASHD	Health
Nirmala Murthy	Consultant	SASHD	Health

(b) Staff Time and Cost (from SAP)
(The system pulls data available for all fields)

Stage of Project Cycle	**Staff Time and Cost (Bank Budget Only)**	
	No. of Staff Weeks	**US$ Thousands** **(including travel and consultant costs)**
Lending		
FY1999		176,448.47
FY2000	64.53	337,917.33
TOTAL:		
Supervision/ICR		
FY2000	0.33	201.63
FY2001	23.96	112,220.33
FY2002	18.96	64,041.43

FY2003	27.06	102,353.43
FY2004	51.36	199,379.30
FY2005	31.04	195,326.43
FY2006	37.77	217,908.68
FY2007	46.79	160,179.44
FY2008	42.63	185,594.67
FY2009	32.83	108,884.21
TOTAL	**377.26**	**1,860,455.35**

Annex 5. Beneficiary Survey Results (if any)

Beneficiary Assessment and Patient Satisfaction surveys conducted during project preparation indicated that (i) capacity for delivering health care of adequate quality and patients' perceptions of quality of care were both low, and were largely neglected areas. In response, the project was designed to directly address these issues; (ii) access of the poor to health services was inadequate. The project selected intervention sites based in part on poverty and access criteria. Baseline data were collected to specifically monitor this aspect, and innovative outreach schemes in partnership with NGOs were planned to address this need; (iii) coordination and linkages between primary and secondary health programs was weak and scarce health resources were being misutilized as a result; (iv) the private sector was the dominant provider for both ambulatory and in-patient services in UP, even for the poor. The project attempted to increase linkages between the public and private sectors by contracting local private doctors in under-served areas, and increasing access to health care by increasing the capacity of doctors of Indian systems of medicine to provide preventive and curative care; and (v) since UP had a very small tribal population (0.2%), who were largely mainstreamed into the general population, with no specific special needs as identified by the BA, the project was designed to address tribal populations through the access/outreach component, and no specific Tribal Development Plan was implemented.

To monitor and track improved access and quality of care to beneficiaries, four Patient Satisfaction Surveys (PSS) were conducted in UP between January 2002 and December 2005; and six in UK between January 2003 and May 2007. The objectives of these surveys were to (i) make an independent assessment of patient satisfaction on a set of key parameters at different levels of the health system; and (ii) analyze trends in patient satisfaction and identify areas that required attention. Patient satisfaction was measured in four segments: (i) availability of services, including proportion of patients who got all prescribed medicines and who were able to complete all tests within the facility; (ii) behavior of doctors, including average time spent with the doctor, whether or not the doctor listened to the patient and then explained the disease and treatment, and patient's perception of doctor's competence; (iii) behavior of paramedic/support staff when making the admission slip, performing tests and dispensing medication; and (iv) cleanliness of the hospital, including cleanliness of wards and hospital beds. The survey consisted of an exit interview at the facility, and did not have a component of household interviews. This is a limitation, since this methodology could result in a biased sample; and does not give an insight into the health seeking behavior of those members of the community members who do not visit the public health facility at all.

Data was analyzed by level of facility (DH(M), DH(F), CHC and PHC) and a mix of respondents was chosen for the sample, including male and female, urban and rural. A wealth asset index was used to estimate the income level of the respondents. Since regular recording of income was not implemented at the facility level under the project, this survey is the best source of information regarding the use of project facilities by the poorest: in UP, about 30% of those surveyed at DH(M) belonged to the poorest quintile; this figure was about 23% in DH(F) and PHCs; while in CHCs, it was only about 16%. In UK, it was found that about 20-25% of respondents were from the poorest quintile at the DH(M), DH(F), CHCs and PHCs; while it was lower at CH/BH at 17%.

The main findings of the surveys in UP are as follows:

- Between January 2002 and December 2005, there was a slight improvement in the behavior of staff in the OPD from 2.34 to 3.00 on a scale from 1-4.
- Many other measures of doctor's behavior, such as listening attentively to the patient, counseling on preventive measures and patient's perception of doctor's competence remained almost static across this time period.
- 71% had had diagnostic tests conducted at the facility; and between January 2004 and December 2005, the proportion of patients receiving all prescribed medicines free increased from 55% to 73%. This proportion was higher at DH(M)s (75%) and CHCs (77%) as compared to DH(F)s (62%) and PHCs (67%).
- Cleanliness at hospitals was perceived to have improved significantly from 1.73 to 2.60 between January

2002 and December 2004, as also overall satisfaction with services received (1.93 to 2.59).

- For in-patients, between 55% and 78% were admitted within 15 minutes of arrival at the facility; however, patients' perception of doctor's competence remained static across the period at about 3.18.
- 78% of in-patients had all required tests conducted at the facility, and those receiving all prescribed medicines went up dramatically from 20% in January 2002 to 51% in December 2005. However, this means that about 50% of in-patients were still not receiving all prescribed medicines, which is cause of concern, given the increases in government funding for drugs through various sources. Almost 45% of respondents identified availability of medicines as a key area for improvement.
- Perception of cleanliness of facilities (outpatients and in-patients combined) went up from 42.4% of respondents being satisfied in January 2002; 59.8% in April 2003; 59% in January 2004; and 64.4% in December 2005. This could be ascribed to the upgradation of infrastructure, on-going maintenance program and contracting out of cleaning services.
- Overall satisfaction with services received went up significantly from 1.97 to 2.56 o the 4-point scale.

Overall trend analysis indicated no significant differences in key indicators between general population, poor and women patients. For example, availability of medicines between January 2002 and December 2004:

The same was true of doctors' behavior towards patients.

The main findings of the surveys in UK are as follows:

- Behavior of staff at the OPD counter remained almost static at about 2.97 on a scale of 1-4 between January 2003 and May 2007.
- Time taken to process patients reduced substantially, with 98% reporting having received the OPD slip with 15 minutes, and about 90% reported seeing the doctor within 15 minutes.
- Almost 75% of patients reported the doctor spending more than 3 minutes with them. Despite this, patients' perception of doctor's competence remained static at about 2.96 on the 4-point scale.
- 87% of patients had completed all prescribed tests at the facility itself; but a matter of serious concern is that between April 2006 and May 2007, availability of all prescribed medicines had declined from 70% of all patients to only 58%. Availability was poorest at PHCs. However, it appears that the poor and women were marginally more likely to receive all medicines as compared to the general population.

- Overall satisfaction with cleanliness of hospitals and with services received has remained static across the period at about 2.7 on the 4-point scale.
- About 77% of in-patients reported having been admitted within 15 minutes.
- In-patients' perception of doctor's behavior remained static across the project period at about 3.1.
- 89% of in-patients had all tests performed within the facility; however, only 49% of patients reported receiving all prescribed medicines free of cost.
- Perception of cleanliness of facilities remained static, with 67% of patients reporting being satisfied in September 2003 and 66% in May 2007.

Again, availability of medicines was identified as a key area for improvement.

Annex 6. Stakeholder Workshop Report and Results (if any)

Not undertaken for Core ICR.

Annex 7. Summary of Borrower's ICR and/or Comments on Draft ICR

UTTAR PRADESH HEALTH SYSTEM DEVELOPMENT PROJECT, CREDIT NO. - 3338 IN

1.1 Key Project Details

Approval by Board of Directors	25 April 2000
Project & DC Agreement	19 May 2000
Project Effectiveness	26 July 2000
Project Period	8 Years 5 Months
Revised Project Closing	31 December 2008
Credit Closing	31 December 2008
Borrower/Implementing Agency	Govt. of India / Govt. of UP

1.2 Project Objective:

The objective of the project is to establish a well-managed health system, which delivers more effective services through policy reform, institutional and human resource development and investment in health services.

1.3 Project Components:

The initial Credit allocation to the Project of US$ US$ 106 Million was revised to US$ 83.332 million, consisting of two major components, namely, policy reforms and improving health service quality and access. Later, with the approval of the extended phase, a third component of pilot activities was also added along with a slight modification in the original components. Accordingly, the revised project components and sub-components are:

a) Policy Development, Institutional Strengthening and Building Implementation Capacity

- Strengthening Policy Development in the State
- Support to Institutional Strengthening
- Building Implementation Capacity
- Support for Developing the Follow-on Project

b) Design and Implementation of Pilot Projects

c) Continuation of Current Project Activities making a significant Positive Impact on Health Services Delivery

- Management Information System
- Civil Works
- Drugs and Supplies
- Equipments
- Hospital Waste Management System
- Improving Access to Health Services
- Maternal Death Audit
- School Health Program

The Project financed for infrastructure strengthening through repair and renovation of hospital buildings, provisioning of medical equipment, vehicles, medicines, medical lab supplies, MIS/IEC materials, furniture, etc. Besides these, provisions were also made for hiring of professional services & consultancies, contracting out of services, training, workshops, studies, salaries and operating costs and maintenance of building & equipments.

1.4 Achievement of Development Objective (DO):

The outcomes of the initial phase of the project (as measured in randomly sampled project facilities – increase in out-patients, in-patients, institutional deliveries, increase in uptake of diagnostic services) were negatively affected by a number of factors which were beyond the control of the project. Project savings were therefore utilized during the extended phase for piloting district level planning and implementation of activities that contribute to improvement of basic health outcomes. Since the outcome indicators of the project can only be measured after two years of

implementation of the extension period activities, the progress of the project is being measured against mutually agreed upon process indicators. Based on these measurements, the progress of the project towards achieving the development objective is satisfactory.

Indicator 1: Improved Health Facility Quality and Efficiency

Field observations indicate that the new activities such as NGO contracting for improving primary health care is now emerging as a successful strategy to reach underserved population and that the proposed expanded coverage as well as the range of Public Private Partnerships (PPPs) proposed i.e. optimal utilization of renovated operation theatres in CHCs through corporate contracting and contracting out of facilities to non-public providers is likely to provide the desired results.

Indicator 2: Improved Health Sector Spending

The GoUP has renewed its commitment toward increasing the health budget allocation and investments in non-wage components. There is steady improvement from the low value in 2003-2004 to the current budget for 2007-08 for the two agreed indicators as shown below:

Financial Year	% of state budget allocated to health	% recurrent non-wage expenditures
2002-03(Actual)	5.78	32.70
2003-04(Actual)	3.70	25.77
2004-05 (Actual)	5.43	34.58
2005-06(Actual)	6.41	47.13
2006-07(Actual)	6.43	52.92
2007-08(Revised)	6.40	50.37

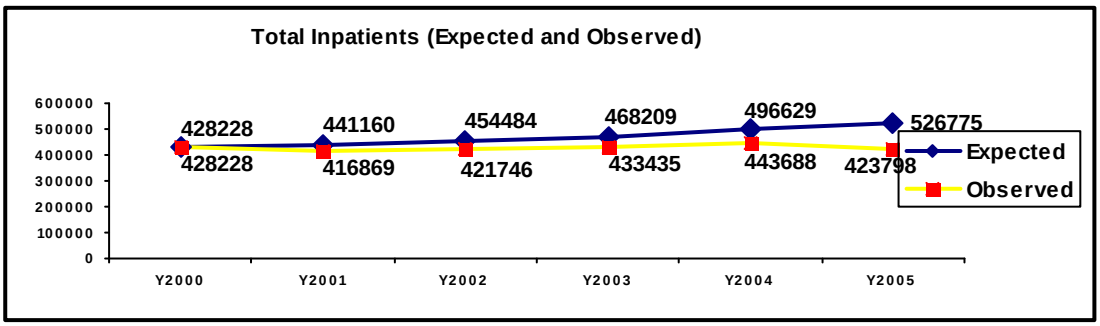
1.5 Summary of Project Performance

Total Outpatients

The Project facilities have been able to meet the target set with respect to total outpatient visits even after discounting the abnormal increase due to slashing of user charges. The user charges were slashed from Rs. 8/- to Re. 1/- in October 2003.

Total Inpatients

The gap between the expected and the targeted figures over the Project period, from year 2000 to Y2005, is gradually widening, which remains a matter of serious concern.

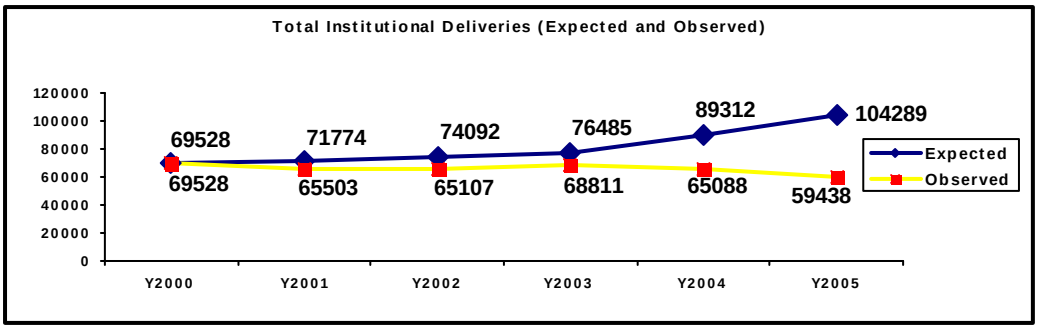


Women Inpatients

The observed share of women inpatients, over the entire Project period has remained consistently around a 60 percent.

Institutional Deliveries

The institutional deliveries, over the entire Project period have not been able to meet the targeted figures

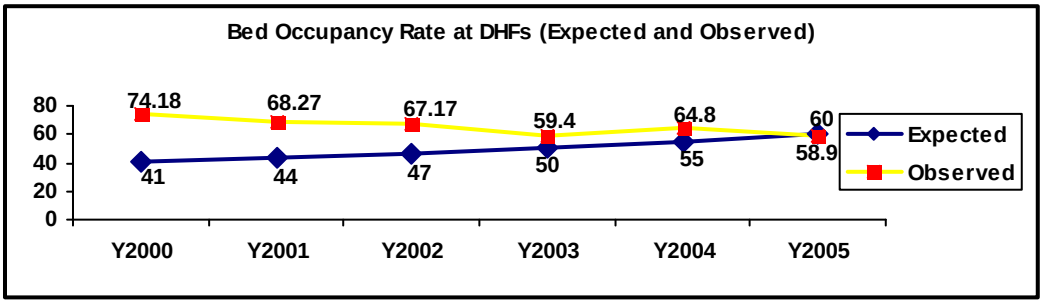


Bed Occupancy Rate (DHMs)

The average bed occupancy rate for DHMs has mostly stayed within the range of 55-60%, indicating an ample room for improvement.

Bed Occupancy Rate (DHFs)

The bed occupancy rate at the DHFs has been falling continuously since the beginning of the Project due to a continuous decline in the number of inpatients.



1.6 Quality of Services Offered at the Project Facilities

Patient satisfaction surveys have been conducted to gauge the perception of the patients regarding the quality of services offered at the project facilities. Satisfaction has been measured across the following four key parameters—

(i) Availability of Medicines
(ii) Doctors' Behaviour
(iii) Cleanliness of Facilities
(iv) Overall Satisfaction with Services Received.

Trend of satisfaction on each of these parameters has been analyzed in three ways— for all patients taken together, for the poor and for the women.

Availability of Medicines

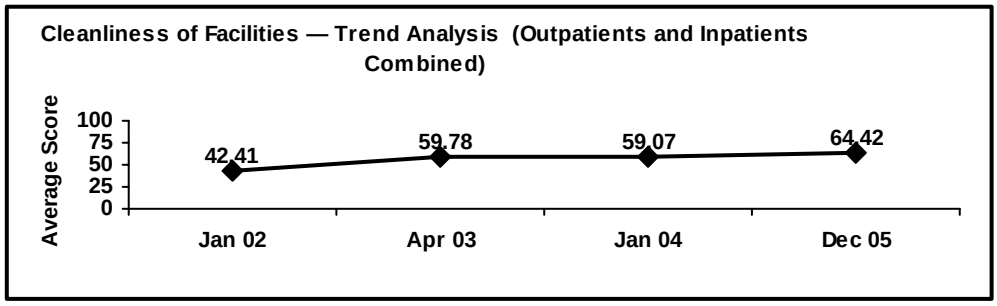
Overall, 71 percent of the patients visiting the Project facilities, reported to have received all the prescribed medicines in the required quantity. What is even more heartening is the fact that, the share of such patients among the poor was even higher (76 percent).

Doctors' Behaviour

Trend analysis of doctors' behavior shows that it has been consistently rated to be satisfactory (average score being around 72 percent or more) during the last three rounds of patient satisfaction surveys.

Cleanliness of Facilities

There has been a significant improvement in the patients' perception regarding cleanliness, compared to the last two rounds.



Overall Satisfaction with Services Received

Trend analysis of overall satisfaction scores shows that it has remained almost constant during the last 3 rounds of patient satisfaction survey.

1.7 Achievement by Components:

a) Policy Development, Institutional Strengthening and Building Implementation Capacity

<u>Strengthening Policy Development in the State</u>

The initial phase of the project supported the development of a Strategic Management Board (Neeti Nirdharan Prakoshtha) and a Public-Private Forum as major contributions to policy development in the State. Along with these, a Strategic Support Group was also constituted under the Chairmanship of DG Medical & Health to address the key policy issues. These bodies have taken several important decisions pertaining to improvement in health service quality & efficiency and for promoting public-private partnership in the State. Some of the important decisions taken in the meetings of the NNP pertaining to improvement in health service quality and efficiency are as follows:

- Hiring of agencies for cleaning and security services on contractual basis.
- Modification of user charges and training of male and female doctors for improvement in institutional deliveries.
- Increasing the number of seats of diploma in anesthesia.
- Starting a fixed-day-posting approach of Specialist Doctors at CHCs.
- Preparing a maintenance policy of hospital equipments and civil works.
- Appointing doctors on vacant posts at various newly constructed and renovated hospitals on contractual basis.
- Preparing a training policy for the State Health Department.
- Extending the HMIS developed under the Project to cover the non-Project districts as well.
- Standard Treatment Guidelines were made and referral protocols established.

However, due to lack of technical support for analyzing the policy issues and making evidence-based decisions to address policy and strategic planning issues, neither of these initiatives could be as effective as anticipated in initiating appropriate policy reforms.

Accordingly, under the extension phase, the State engaged an institution having a multi-disciplinary team of experts outside the government system which was christened Policy Analysis Unit (Think-Tank) to undertake regular analysis of health policy issues and inform the key stakeholders on plausible options and strategies. Apart from the PAU, a Policy Development Unit of UPHSDP has also been functionalized with the appointment of a Health Economist Consultant.

Support to Institutional Strengthening

Organizational Review and Development & Human Resource Management Policy Development

IIM Lucknow has been hired to conduct the study on OD Review and HRM Policy development. It has already presented the preliminary findings of the study in a series of meetings with Government representatives, UPHSDP officials, the World Bank and other stakeholders. The final report is expected in December, 2008.

Manpower Development through Training:

Training of health service providers has been an important component of the Project for up-gradation of management, clinical and technical skills of all specialist physicians, medical officers and para-medical staff in the State. The following major training programs have been organized:

- Management training of 1600 Doctors and 600 Paramedics
- Clinical training of 554 Doctors and 57 Paramedics
- Induction training of 8 batches of new recruits

Incentive Design & Piloting:

The study for designing of schemes that help motivate workers has been done by the Indian Institute of Health Management Research (IIHMR), Jaipur. The consultant of IIHMR made a presentation of the final findings and their initial proposed suggestions during May 2007 visit of WB. Further, a state level dissemination workshop was organized at Lucknow on 03.09.07.

Training of Gram Pradhans on NRHM:

4872 Gram Pradhans in 858 villages from 11 blocks of 4 Pilot Project districts have been trained on issues such as, nutrition, sanitation, hygiene, safe drinking water.

Building Implementation Capacity

The Project has deployed all the necessary human resources to strengthen the PMU and DPMUs. With the focus on only 4 Districts during the extension phase, the regional PMUs were no more required and hence were abolished. All the management and other staff for DPMUs in Focus Districts have been filled. Chief Medical Officer of the pilot

districts have been designated as the District Project Manager and one Dy. CMO is working as Additional Project Manager.

Support for Developing the Follow-on Project

Conducting Social Assessment study

A consultant has been hired for conducting social assessment study in the state for the proposed follow-on project.

Conducting Environmental Assessment study:

A consultant to conduct Environmental Assessment in the state of U.P. has been hired by the Project. The consultant has submitted draft final report, which was shared with the Bank Mission in May, 2008. The environmental study for the next Project will be got done once the second project is principally agreed by the GOI and the World Bank.

Workshops for disseminating the findings and developing suitable strategies:

The Project organized four Workshop of 'U.P. Health Partners Group' in which various stakeholders, including the donor agencies like WB, USAID, DFID, UNICEF and representative of Govt. Department viz. Women and Child, Medical & Health, Panchayati Raj, and various experts participated in the Workshops. The brief of such workshops is as below:

Focus of Workshop	Held on
Rural Health Mission – a collective approach in UP	June 9 , 2006
Identifying interventions for the new project	September 28, 2006
Round table on Monitoring	December 13-14, 2006
District action plans, village planning and innovations	May 9, 2007

Conducting baseline survey for determining the current status of key indicators identified for monitoring

Substantial preliminary works viz. list of key indicators, data collection tools / schedules and methodology finalized in consultation with the World Bank. The Department of Economics and Statistics (DES), Govt. of U.P. is proposed to be entrusted with the task of conducting baseline survey in the state. Once the follow-on Project is principally agreed with the GOI & the World Bank, it will be done by hiring the consultant.

Preparing the detailed PIP for the follow-on Project:

The consultant has been hired for preparing PIP for follow-on Project. Draft PIP has been submitted and reviewed during the Technical Mission held in the month of September, 2007.

b) Design and Implementation of Pilot Projects

District Action Plans

The technical assistance of SIFPSA was taken for preparing DAP document for 4 focus districts under the restructured Project. The District Action Plans prepared at the District level was launched in respective Districts in the month of September-October, 2006. The overall progress of the plans has been satisfactory.

Hiring of Cleaning and Gardening Services:

Cleaning and gardening services were contracted out in the four pilot districts. Encouraging results led to the realization that similar services would be necessary in other districts where the Project has renovated the facilities. The Project Steering Committee has approved the replication plan of Cleaning and gardening services in 24 Districts and also directed to take up the same activity in all 42 remaining Districts of the State along with laundry services in hospitals of all 70 Districts of the state. The process of hiring the agency for Cleaning and gardening services in 28 Districts is in progress (including 4 Pilot Project and Medical Directorate).

Training of Angan Wadi Workers on Immunization:

1161 AWWs across the 11 pilot blocks have been trained on providing immunization to pregnant women and children. The objective of this approach is to develop a local resource person for augmenting the immunization efforts in the State.

c) Continuation of Current Project Activities making a significant Positive Impact on Health Care Services Delivery System:

Management Information System

Hospital Management Information System (HMIS):

Initially HMIS developed by TCS was implemented in 11 districts. Based on the feedback it was found that HMIS application required infrastructure and skilled manpower support along with easy access of application in the field for effective monitoring purposes. Then it was decided to make the software web-enabled with the help of NIC, state unit. Efforts were made for the development of the web enabled modules related to national program viz. Malaria, TB,

Leprosy, blindness and ANM register. Later on modules for NRHM reporting system has been developed and uploaded successfully.

Personnel Information System (PIS):

The web based PIS System has been designed developed and implemented to monitor the human resource activity in the department of medical and health. The PIS has been hosted at NIS state unit server. The system has collected and being updated regularly, personnel information regarding doctors, paramedical staff and other employees of the department and is providing information to the senior management to take a prompt decision, regarding transfer, posting of the skilled manpower in the State.

Financial Management Information System:

The web based Financial Management System of Medical and Health Department is an application to monitor the Budget allocation at the district level under different schemes. The sanction and budget allocation is being done at the head quarter level i.e. form the Medical Directorate of Uttar Pradesh. The module having expenditure and surrender of the budget will be implemented at the District level; the lease line connection is established between NIC office and Medical Directorate office. The system is hosted at NIC server.

Provision of Internet Connectivity in all Districts

To ensure operationalization of all web enabled software developed under the project, provision of internet connectivity has been done in 255 locations in the State.

Hiring of Service Agency for Providing Contractual IT Staff

Skilled manpower has been hired through an agency for the smooth functioning of the various information systems developed under the project.

Hospital Management System

Besides the above information systems, a hospital management system has also been piloted at the DHM, Bahraich.

Beneficiary Tracking System

To monitor the block level health data through ANM based on PDA/laptop device, a MIS monitoring system has been evolved and being piloted in 31blocks of Project District. BTS is helping to strengthen mother and child care services in rural area by improving strong monitoring.

Civil Works

Strengthening of Project Facilities

The project has taken up to strengthen 117 health facilities during the initiation phase by renovating and strengthening the civil works. Ten health facilities (7 BPHC, 1 CHC, 1 DHM and 1DHF) were excluded due to various reasons. The Civil Work was finally done in 107 facilities only. The physical progress against the sanctioned scope of Civil Works is as presented below.

Strengthening of Facilities:

SN	Details	No. of Units Completed
1	Strengthening of BPHC	29
2	Strengthening of CHC	27
3	Strengthening of DHM	24
4	Strengthening of DHF	24
5	Strengthening of Combined Hospital	3
6	Construction of EM workshops	1
7	Construction of Garages at 250 CHC	239
8	Waste Management Godowns	117

Maintenance of Renovated Facilities

The infrastructure module has been designed for maintenance data base of the facilities. The module is web enabled and uploaded. The facilities renovated under the Project were being maintained by the Project itself through its Engineering Cell with the help of DPMUs in the districts.

Drugs and Supplies

Procurement

This set of activities was intended to improve the supply of essential drugs in the public sector, and to rationalize drug use across the State. A working group of experts had prepared a list of essential drugs to be used for each type of health care institutions in the State, which has been approved by Government. Drugs are listed according to

generic name under therapeutic groups. All drugs are purchased according to these names and all products are required to be certified for WHO/GMP Process. The Project has finalized the quantification based on a detailed quantification exercise and ongoing monitoring of stocks. Procurement of approx. 230 types of drugs in 5 rounds has been completed and supplied to 117 health facilities under the Project. Before the fifth and final round of procurement, a V.E.D. analysis of 230 drugs of approved list was done in the PMU and it was decided that only vital and essential drugs be procured and supplied in 5th round.

Strengthening of Procurement Process:

In order to streamline the procurement of drugs and equipments in the state, separate Model Bidding Document for procurement of Equipments and Drugs has been prepared in consultation with Director General, Medical & Health, U.P., Director-CMSD, and Finance Controller of Directorate of Medical & Health. The Model Bidding Document has been approved by the Department of Medical & Health, Govt. of U.P. and necessary Govt. Orders (G.O.) is under process of issuance.

Equipment and Furniture

Equipment norms had been developed to standardize and achieve a balance between the services required to be provided in each type of facility. A facility survey was carried out by the department through an independent agency to identify the existing gaps as per norms and the status of existing equipment. Based on this survey, equipments were identified for procurement under the Project. Most of the equipments have been procured and distributed to various units as planned.

In addition to procurement of equipments, the Project also envisaged the repair of existing equipment in 117 Project facilities and non-Project facilities. A central workshop for repair of medical equipments has been established in Lucknow. The Project has completed the one-time repair activity in all the Project facilities. The overall progress of procurement of equipment and furniture has been satisfactory. Details of procurement are presented as **Annexure-II**.

Equipments Repair & Maintenance

Database of all the equipment available at the project districts has been prepared with the help of the technical staff of the CEMMWS. This data is being used for carrying out maintenance procedures as described in equipment maintenance. The Project had maintained equipments in all 28 project districts till 31.3.2006 and thereafter, maintenance work equipments in 4 pilot project districts is being done through Project and in remaining 24 project districts, it is being done through state budget.

- Training has been provided to the technicians on equipment maintenance
- Repair & maintenance of the procured equipment is being carried out by the workshop as and when demanded by the project facilities.

Hospital Waste Management:

HWM activities for health facilities (155-DHM,DHF,CH, 340CHC, 860BPHC in all 70 districts have been fully outsourced by the project to 10 Combined Treatment facilities after getting NO from The World Bank. Training on segregation and disposal of hospital waste to all the staff has been given by the service providers at respective facilities. CTF at Allahabad, Kanpur, Jhansi, Faizabad, Bareilly & Meerut has started functioning. CTF at Gorakhpur, Lucknow & Varanasi will be started within 15 days as NOC from UPPCB has been received. NOC for CTF at Aligarh is still awaited from UPPCB.

Improving Access to Health Services through Innovative Approaches

Through NGO Contracting

The Project has been implementing an NGO scheme for increasing access of disadvantaged population especially for the poor and women living in remote areas, to health services in the 28 Project districts and to provide limited, curative and preventive health care. In the year 2003-04, 73 NGOs had been contracted. After evaluation of the outcomes, 119 NGOs were further contracted for the year 2004-05. In the 2 years extension phase of the Project, the project has hired the services of the 301 (67 old + 234 new) NGOs in 2006-07 in 28 Project districts for providing limited curative, preventive healthcare services specially for maternal and child health care. Regular independent evaluation of the NGOs done by IIM, Lucknow has found this approach quite satisfactory in reaching out basic health care services to the unreached areas. In the year 2008 also services of 169 satisfactorily performing NGOs are being taken by the Project.

Handing-over an APHC to NGO

During the extension phase of the project, it was proposed to hand over a CHC/BPHC to an NGO on an experimental basis to ensure its optimal functioning. Later on the State government decided to hand over an APHC only, because the CHCs were to be converted into FRUs under NRHM. Since the activity of handing over a government facility involves a major policy decision, the proposal was prepared and sent to the Department of Medical Health and Family Welfare to seek approval from state cabinet.

Maternal Death Audit

UPHSDP did the pre-testing of the maternal death reporting on prepaid, printed post cards in Shivgarh Block Raibareily district. On the basis of the learning acquired during the pre testing, it was proposed that Anganwadi workers can play an important role in collecting data on maternal deaths. Also, this process might contribute in strengthening the maternal death reporting system of ICDS.

School Health Program

Although there exists a program for health check-ups in schools, the State Government felt a strong need for its thorough revamping. Keeping the above in mind, the current project designed a more comprehensive School Health Program in collaboration with the Government's Education for All project (Sarva Shiksha Abhiyan). The basic program design and its piloting were approved by the Project Steering Committee and the Project Governing Board. Accordingly, the School Health Program was piloted in Banda, Badaun, Baharaich, Mainpuri and Varanasi urban.

Quality Assurance

Quality Assurance was adopted as a vital component of the Project and aimed at developing a systematic and planned approach for assessing, monitoring and improving the quality of health services on a continuous basis. A brief outline of the various measures taken to institutionalize the QA strategy in the project facilities is presented hereunder—

- Under Quality Assurance, QA strategy has been developed based on the feedback on Quality indicators from the health facilities.
- Regional consensus building workshops were conducted in all the 4 regions at Muzaffarnagar, Kanpur, Allahabad and Jhansi to discuss draft strategy of QA.
- QA strategy was piloted initially in 4 hospitals, DHM Kanpur, DHM Allahabad, DHF Jhansi and DHM Muzaffarnagar and later on, it was disseminated to Project covered facilities.

Although the QC and QA interventions were initially quite successful, the momentum could not be sustained due to continued civil works and mass transfers of doctors during the early stages of the project. The Project has also initiated accreditation of Dr. Ram Manohar Lohia Hospital by NABH during extended period of the Project.

1.8 Lessons Learnt

1) Uttar Pradesh is a large state with wide regional disparities. In order to ensure the provisioning of quality healthcare services across the entire state, there needs to be established a strong monitoring and supportive supervision mechanism, comprising of regular field visits by not only the facilities in charges, but also officials at the state and district headquarters. These visits need to be further augmented with field visit reports as also the routine health care system reports.
2) Lack of awareness in the community about the health care services being provided by the Government, results in poor uptake of these services. Focused efforts therefore need to be made, to keep the community informed and thus ensure appropriate health care seeking behavior change.
3) Large scale transfers and postings at all levels of functioning adversely affect service delivery. Conscious efforts need to be made to rationalize transfers and postings.
4) Consultancy for civil works should be awarded to government agencies. Private agencies were not up to the mark in terms of quality as well as timeliness of works executed.
5) Infrastructure of NIC should be used for implementation and sustainability of IT MIS applications of the Department in view of security and communication.
6) Capacity building is required at the district level in the areas of procurement, planning and use of computers.
7) Greater convergence is required between the stakeholders (Government departments, donor agencies, implementation partners, etc.) to avoid program overlaps and optimize performance.
8) Program managers at all levels should be encouraged to use the information generated by HMIS. Building their analytical skills could be beneficial in accurate resource and program planning.

9) Patient and staff satisfaction should become a regular feature in order to assess and improve responsiveness of public hospitals.
10) Employee empowerment and bottom up approach need to be built in for sustaining the endeavor of Continuous Quality Improvement.

1.9 Bank Performance

Lending: Satisfactory

The project was well prepared with strong involvement from both the Bank and State Government. The Project Appraisal Document (PAD) is a summary document consistent with both State and Bank priorities. For the most part, preparation teams were fielded with the required expertise and the skill-mix was maintained throughout identification, preparation, and appraisal/negotiation. Important area of expertise, however, was inadequately represented - private sector development. This inadequacy is reflected in a lack of attention to a comprehensive approach toward facilitating engagement and development of the private health sector. Assessment was slightly hindered by the lack of measurability of development objectives and specifications of some performance monitoring indicators (baselines, targets, etc) in the PAD.

Supervision: Satisfactory

Overall project supervision and reporting was adequate, for the most part, as were terms of reference for the various missions, frequency of supervision and time spent in the field. Aide-Memoirs and follow-up letters focused on key, specific detected implementation problems, suggested interventions, and follow-up agreed actions for the State. The team was innovative and efficient in its use of resources, and made good use of support from the India Country Office; third parties were involved when needed. The supervision effort also deserves credit for fostering learning exchanges among the states, and in dealing effectively with implementation barriers.

However, the supervision of the Bank Mission was more focused on the implementation efforts of the Project Management Unit; leaving the interaction with the Government (Health Department) and other decision makers limited to only during wrap up meetings. There were many issues requiring active involvement and intervention of other departments of Government. Ideally widening of the scope of supervisory mission and involvement of the Government and key decision makers in regular review and appraisal could speed up the implementation of the time bound projects.

Overall Bank Performance: The Bank's overall performance was satisfactory.

1.10 Sustainability Measures:

The Government of Uttar Pradesh is fully committed to the reforms initiated under the Project. A dialogue has already been initiated to sustain the efforts made in the area of Hospital Waste Management, outsourcing of cleaning, gardening and security services, maintenance of buildings & equipment, Management Information Systems, etc. through the handing over of these services to the government.

1.11 Financial Achievement:

After separation of Uttaranchal from Uttar Pradesh, the total base project cost including contingencies for Uttar Pradesh was estimated at Rs. 4508.90 Million (US$ 106 Million / SDR 70.56Million), of which IDA financing was estimated to be approximately 86% and the remaining 14% was to be the share of the State. However, due to diversions for the Tsunami Relief Fund, the net World Bank Credit available for the Project was curtailed to SDR-51.663 Million. The Project was restructured in the year 2004 and 2006 and revised project was estimated to be Rs. 4248.65 Millions. Of this amount, Rs. 2795.95 Million was allocated for the first phase of the project (26 July 2000-31 December 2005) while Rs. 1452.70 Million was the allocation for the Extension Phase (1 January 2006-31 December 2008). As on 8th August, 2008, US$ 64.637 million has been disbursed by the IDA, which is 79.70 percent of the total IDA Credit Available as on date (i.e. US$ 83.332). The claims worth US$ 1.781 million under pipeline with CAAA. The Project has got another year extension till 31st December, 2008 and Project envisages availing the remaining credit during the extension period.

Uttarakhand Health System Development Project: Implementation Completion Report (Credit No. 3335 IN)

1. Key Project Details

Approval by Board of Directors	April 25, 2000
Project & DCA Agreement	November 8, 2001
Project Effectiveness	* July 26, 2000 (actually effective on July 2002)
Project Period	** 8 years 5 months (actually 6 years 5 months)
Project Closing	December 31, 2008
Credit Closing	December 31, 2008
Borrower/Implementing Agency	Govt. of India / Govt. of Uttarakhand

* As the Uttarakhand Health Systems Development Project bifurcated from the UP Health Systems Development Project with the emergence of Uttarakhand as a new State, a substantial loss of around 1½ years took place in initiating the Project.

** The agreement with Uttarakhand State was signed on November 8, 2001 and PMU became functional in July 2002 only.

2. Project Development Objective

To establish a well-managed health system that delivers more effective services through policy reforms, institutional and human resource development and investments in health sector.

3. Project Components

The initial SDR credit allocation to the Project was INR 7448.50 lacs was revised to INR 8689.10 lacs consisting of:

- **COMPONENT – 1**: *Policy Reforms Management Development and Institutional Strengthening*

Subcomponent 1: Strategic Management Capacity
Subcomponent 2: Strengthening Performance, Accountability and Efficiency
Subcomponent 3: Building Implementation Capacity

- **COMPONENT – 2** : *Improving Health Service Quality and Access*

Subcomponent 1: Improving Clinical Service Quality
Subcomponent 2: Improving Public Health Service Quality
Subcomponent 3: Innovative Schemes for Disadvantaged Population

The Project financed for repair, renovation of hospital buildings, medicines, vehicles, medical equipment, medical lab supplies, IEC materials, furniture, professional services, consultancies, capacity building, workshops, various studies, salaries and operating costs and maintenance of building and equipments.

4. Borrower's Evaluation

4.1 Achievement of Development Objective

The findings of fifth round of the Annual Performance Survey (APS) 2006 showed that the targets for 2007 were largely met in 2006. In addition, Project has contributed towards capacity development of the State health system for improved targeting, institutionalizing hospital autonomy, improving information systems and initiating service quality monitoring. The Project has also started actively pursuing activities to increase access of the poor to basic health services through the reimbursement of services provided to Below Poverty Line (BPL) patients. This is now being scaled up by the State Government in their planned introduction of a Health Insurance Scheme. The experience of contracting Non-Government Organizations (NGO) for provision of basic services in difficult to reach areas is also being considered for larger scale state implementation. Under the Project, a very comprehensive Health expenditure review has been carried out leading to further work on preparation of a Medium Term Expenditure Framework and a Benefit Incidence analysis for the sector. Consultancies provided by the project, along with the wider discussions held during missions and around presentations of such consultant reports has contributed to a broader understanding of health issues in the state. State health budget allocations and expenditures during the project lifetime have also seen a very positive increase.

1.1 Indicator 1: Improved health facility quality and efficiency

The 2006 survey results show that all important indicators for 2007 had already been met. Revised indicators for the final extension period have been calculated and the final APS for the year 2007 and first half of 2008 is going to be carried out before the Project closes.

1.2 Indicator 2: Improved Health Sector Budgeting and Spending

The above improvements were also reflected in the overall health sector budgeting (plan and non-plan) and expenditures. The actual expenditure increased from 4.44% of total government expenditures in 2005-06 to 4.48% in 2006-07. The Revised Estimates for FY 2007-08 is 5.42% (including supplementary budget) and the budget estimate for 2008-09 is 4.86%.

Financial Year	Total State plan and non-plan budget & (Expenditure)	Total Health** plan and non-plan budget & (Expenditure)	% increase in Health expenditure	Capital Health expenditures as % of total Health expenditures
2001-02	4953.73 (3712.74)	202.12 (146.30)	--	6.13%
2002-03	6115.90 (5985.06)	259.68 (183.16)	25.19	13.39%
2003-04	8101.70 (6618.63)	310.95 (209.42)	14.34	16.75%
2004-05	8225.79 (7218.61)	329.78 (248.58)	18.70	20.32%
2005-06	9321.82 (7918.96)	436.08 (351.72)	29.32	20.87%
2006-07	9321.71 (9192.01)	417.40 (411.51)	17.00	35.54%
2007-08*	11520.03	624.20		
2008-09*	12441.32	605.07		

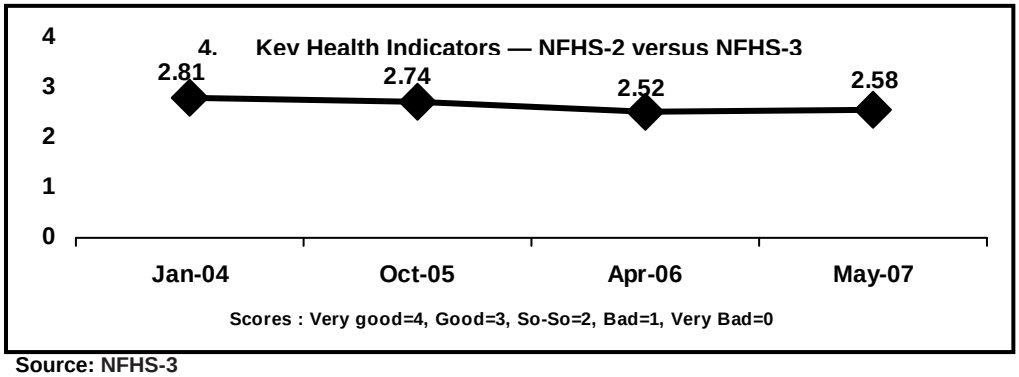
* Only revised Budget Estimates for 2007-08 and Budget Estimates for 2008-09

**Health: Medical and Health Sector includes budgets for Health, Family Welfare, AYUSH and ESI.

Keeping in view that the targets set for the original Project closing in 2005 were met in 2004 and that the targets for the extension up to end 2007 were met in 2006, the achievement of the Development Objective is rated as *Highly Satisfactory.*

4.2 Current Status of the Health indicators

The State has made a considerable progress in improving the health status of its population. Compared to 1999 (NFHS-2), all the indicators except infant mortality rate have registered a significant improvement. Surprisingly, there has been a marginal increase in the infant mortality. Further, there has been appreciable increase in outpatient visits and inpatient admissions. These improvements, to a large extent, can be attributed to the number of initiatives taken by World Bank funded Uttarakhand Health Systems Development Project (UKHSDP). The following diagram illustrates the improvements registered between the period 1999 (NFHS-2) and 2005-06 (NFHS-3).



Source: NFHS-3

5. Actions taken during the Project period (2002-2006)

➢ **COMPONENT – 1**: *Policy Reforms Management Development and Institutional Strengthening*

Subcomponent 1: Strategic Management Capacity

- Network of following institutions was developed in order to streamline management and decision- making:
- Strategic Support Group (SSG)
- Project Governing Board headed by the Chief Secretary, Govt. of Uttarakhand
- Project Steering Committee headed by the Principal Secretary, MH&FW, Govt. of Uttarakhand
- Procurement Committee headed by the Project Director, UKHSDP
- Project Management Unit (Medical Wing, Civil Wing, Finance Wing and one District Project Officer at each district)
- Organizational Development study conducted and new organogram developed for consideration of the State Government.
- Equipment and Civil maintenance policy has been developed and is under active consideration of the State Government.

Subcomponent 2: Strengthening Performance, Accountability and Efficiency

- Annual Performance Survey in 2001, 2002, 2003, 2004, 2005, 2006 and 2007 being done.
- Piloting of Annual Performance Appraisal System initiated.

Subcomponent 3: Building Implementation Capacity

- Hospital Autonomy
  - Chikitsa Prabandhan Societies formed in 29 big hospitals & 49 CHCs and is in process of formation at PHC level.
  - Sensitization workshop for the in-charges of facilities.
  - Hospital managers deployed at some big hospitals.
- BPL Reimbursement
  - 6.21 lacs BPL Health cards prepared & distributed.
  - Presently big autonomous hospitals covered under this scheme on pilot basis and one private hospital.
- Hospital Management Information System (HMIS)
  - PIS & RCH MIS developed and data entry done.
  - Made functional at DGMH.
  - A review of HMIS and recommendation done by WHO in year 2002.

➢ **COMPONENT – 2** : *Improving Health Service Quality and Access*

Subcomponent 1: Improving Clinical Service Quality

- Quality Assurance initiated.
  - Clinical & Non clinical indicators for grading developed.
  - Two rounds of monitoring surveys conducted to assess the progress achieved in quality assurance and identifying gaps. Third round under process and a system for private clinics accreditation for Janani Suraksha Yojana (JSY) scheme is being done.
  - Quality Improvement Teams (QITs) formed and are functional.
- Training Need Assessment (TNA) done and various Clinical, Managerial & Behavioural trainings were imparted to Doctors and Paramedical staff.
- Civil works completed in 36 facilities and 1 remaining work to be completed soon.
- Various major and minor equipments have been procured for various Project facilities including Trauma Center at Srinagar, Garhwal.
- Procurement of 13 Mobile Hospital Vans for 13 districts of the state.
- Patient Satisfaction Survey in 2001, 2002, 2003, 2004, 2005, 2006 and 2007 being done.

Subcomponent 2: Improving Public Health Service Quality

- Bio Medical Waste Management (BMWM)
  - A study for situational analysis and waste audit at 4 different health facilities in Dehradun district conducted. A site specific BMW plan developed for 34 health facilities.
  - Standard Operating Procedures (SOP) and awareness material developed and disseminated.
  - BMW manuals for various service providers developed.
  - On-site training on Bio Medical Waste Management given at each project facility.
  - Construction of deep burial pits at project sites
  - Procurement of BMWM equipment and supplies.
- Information Education and Communication (IEC)
  - Multimedia campaign on Safe Drinking Water and Smile Train Project.
  - Evaluation of campaign on Safe Drinking Water by a third party.
  - Piloted Behaviour Change Communication (BCC) exercise in 2 districts.

Subcomponent 3: Innovative Schemes for Disadvantaged Population

- A study for the role of Private health sector in the state of Uttarakhand.
- Contracted NGOs/ Trust for delivering basic healthcare services in 5 disadvantaged blocks.
- Monitoring and evaluation of NGO by the third party.
- Integration of AYUSH with Modern system of medicine
  - Clinical trainings in Areas of Excellence including Panchkarma and MIPS.
  - Publication of 3 issues of AYUSH Journal and one booklet on Doon Hospital, Dehradun.
  - A workshop on Traditional Practitioners organized and their claims documented.

6. Actions taken during Extension Phase (2006-2008)

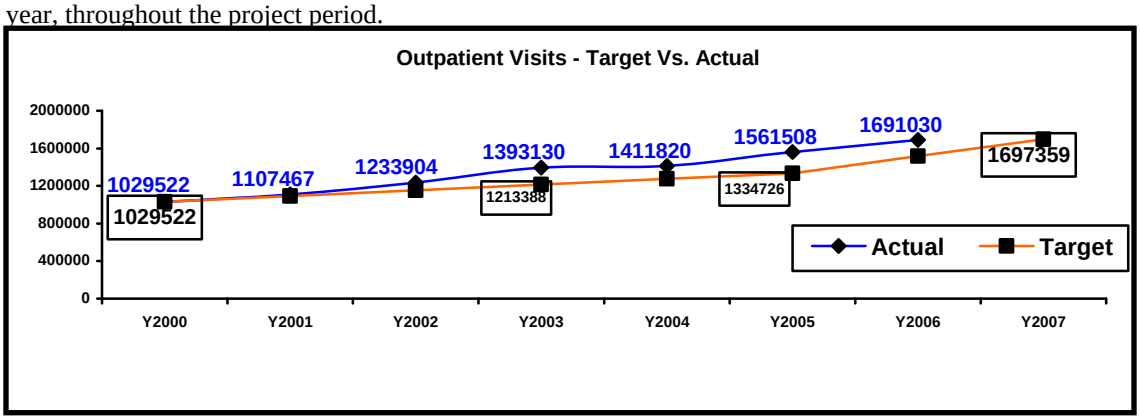
- A strategy and action plan for entire state in Infection Control and Bio Medical Waste Management has been developed and handed over to DGMH for implementation.
- Extension of NGO projects
- Consultants were hired for development of Second phase PIP, Organizational development various studies like Social Assessment, Health Financing, Emergency & Trauma Care needs arising due to Road accidents, Adventure sports, Natural disasters, Tourists & Pilgrims, third round of monitoring of Quality assurance, Village Health Planning, Health communication, Kishori Utthan Pariyojna, preparation of Financial Manual and automation at DGMH.
- A status report on procurement systems and future roadmap developed by Crown Agents.
- Project facilitated development of State Procurement Rules 2008.

7. Project Performance (2002-2006)

Annual Performance Survey from Y2001 to Y2006 clearly demonstrates the improvement of health services at the 35 Project facilities remarkably as depicted below:

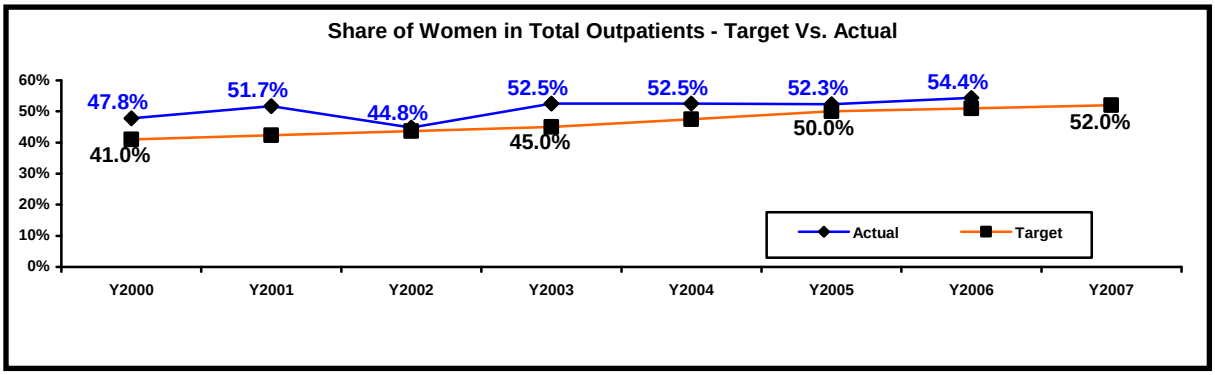
7.1 Total Outpatients

All the 35 UKHSDP facilities combined, the number of total outpatients has registered a good 8.3% growth during Y2006 and has reached quite close to the end of the Project target of 1,697,359 outpatients. Level-wise analysis indicates that while there has been a good growth in the number of outpatients at the district level facilities (DHMs, DHFs and CH/BH), the performance of rural facilities (especially CHCs) warrants an urgent attention, mainly in respect of posting of doctors. Further, all Project facilities combined, the actual number of outpatients exceeded the targeted number of outpatients in every year, throughout the project period.



7.2 Women Outpatients

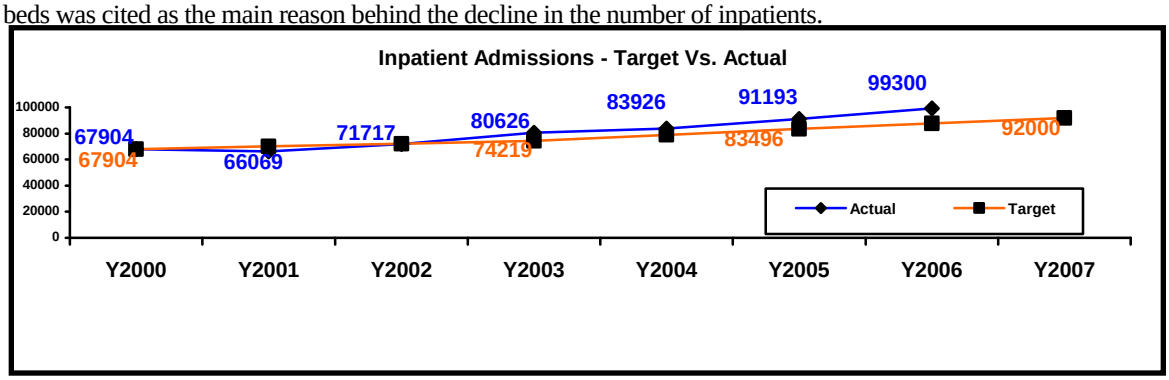
As regards the share of women in total outpatients, it was targeted to be maintained at 52%, the level achieved by the end of Phase-I. It is indeed heartening to note that the target has not only been met, but there is a further improvement (albeit marginal) over the Y2005 level.



7.3 Total Inpatients

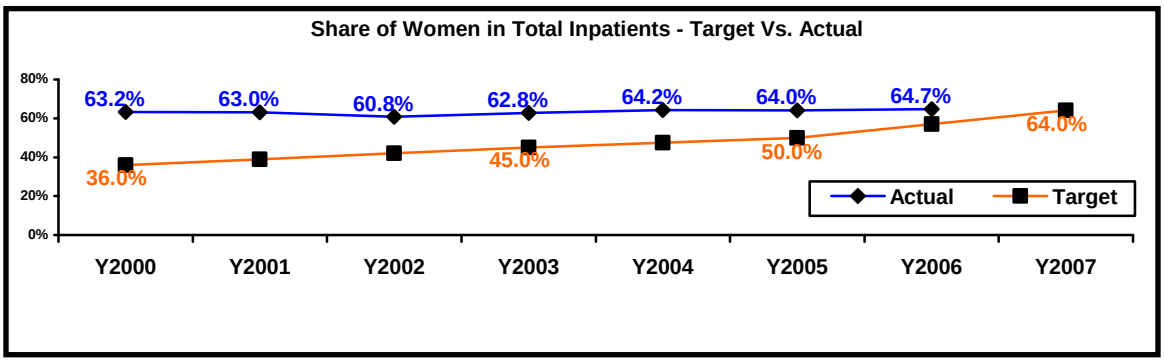
All Project facilities combined, the number of total inpatients has registered a good 8.9% growth during Y2006 and has already exceeded the end of the Project target of 92,000 inpatients. Level-wise analysis indicates that there has been a significant increase in the number of inpatients across all levels of facilities, barring Combined/Base Hospitals, which have registered a decline. In the case

of Combined Hospital Gopeshwar, transfer of the Orthopedic Surgeon and 5-month long leave of the Child Specialist were reported to be the main reasons behind the steep decline of nearly 8%. In the case of Base Hospital Haldwani, a total of 13 beds were removed from the various inpatient wards to make space for the installation of new equipments. This reduction in the number of beds was cited as the main reason behind the decline in the number of inpatients.



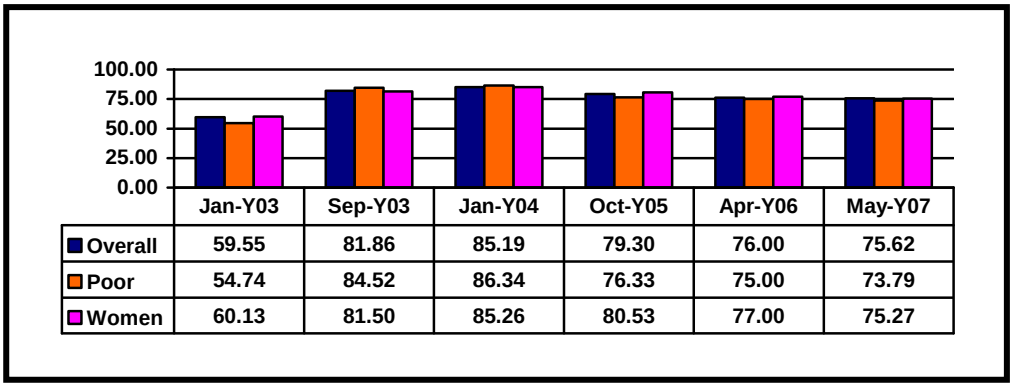
7.4 Women Inpatients

As regards the share of women in total inpatients, it was targeted to be maintained at 64 percent, the level achieved by the end of Phase-I. Y2006 results show that this target is being met.



7.5 Institutional Deliveries

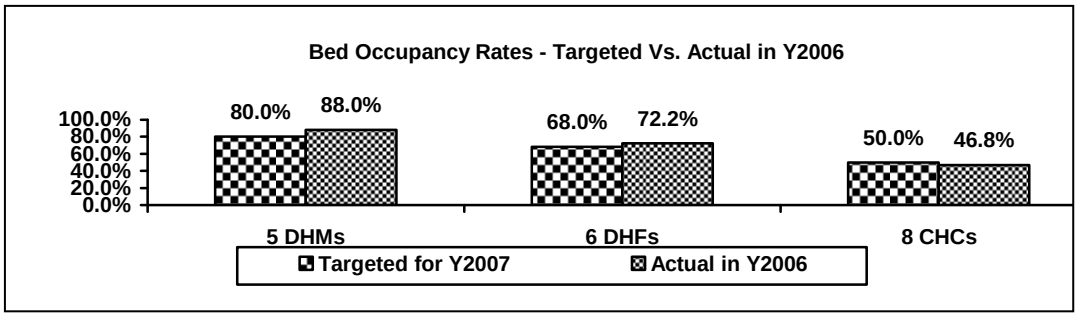
All Project facilities combined, the number of institutional deliveries has recorded a quantum jump of a 20% in Y2006 and has already surpassed the end of the Project target of 17,000 deliveries. Level-wise analysis indicates a whooping growth of nearly 27% at the DHF and CHC levels, mainly due to the increased awareness and enlarged scope of *Janani Suraksha Yojana*. However, the growth at the PHC level has been only around 7% and requires special attention.



	Jan-Y03	Sep-Y03	Jan-Y04	Oct-Y05	Apr-Y06	May-Y07
Overall	59.55	81.86	85.19	79.30	76.00	75.62
Poor	54.74	84.52	86.34	76.33	75.00	73.79
Women	60.13	81.50	85.26	80.53	77.00	75.27

7.6 Bed Occupancy Rate (BOR)

In consonance with the increase in the number of inpatients, there has been an impressive increase in the overall (average) bed occupancy rates at the



Project supported DHMs and DHFs. Due to decline in the number of inpatients at the CH/BH level, BOR has also declined at this level. At the CHC level, due to an increase in the number of functional beds, the BOR has not registered any significant increase despite an increase in the number of inpatients.

7.7 Utilization of Diagnostic Services (Hematology tests per 100 patients)

All Project facilities combined, the number of hematology tests conducted per 100 patients has registered a significant improvement, rising from 12.1 in Y2005 to 14.5 in Y2006. Level-wise comparisons reveal a significant improvement at all levels, with maximum improvement being recorded at the District Hospitals, mainly due to the positioning of additional Lab Technicians through the Project.

No. of Hematology Tests conducted per 100 Patients (Y2006 Vs. Y2005)

Facility	Tests Per 100 Patients	
	Y2005	Y2006
5 DHMs + 6 DHFs	15.0	17.9
2 CH/BHs	18.6	19.6
8 CHCs	4.0	5.4
13 PHCs	1.0	1.4
Overall	**12.1**	**14.5**

7.8 Utilization of Diagnostic Services (X-rays per 100 patients)

As regards the number of X-rays conducted per 100 patients, here too, an improvement is witnessed at the District Hospitals and CHCs. However, at the CH/BH level, a decline is noted, mainly due to the transfer of the Orthopedic Surgeon posted at the Combined Hospital, Gopeshwar.

Comparison of X-rays conducted per 100 Patients (Y2006 Vs. Y2005)

Facility	X-rays Per 100 Patients	
	Y2005	Y2006
5 DHMs + 6 DHFs	4.5	4.7
2 CH/BHs	7.3	6.6
8 CHCs	3.0	3.2
Overall	**4.6**	**4.7**

7.9 Integration with AYUSH

The UKHSDP has initiated efforts to bring AYUSH system of Medicine into the mainstream. Placement of Homoeopathy and Ayurvedic doctors started from Y2003 and Y2004, respectively at the District level hospitals, CHCs & PHCs. The number of patients seen by the AYUSH doctors has been constantly rising over the last 3 years.

Year-wise No. of the Total Patients Seen by the AYUSH Doctors (All Facilities Combined)

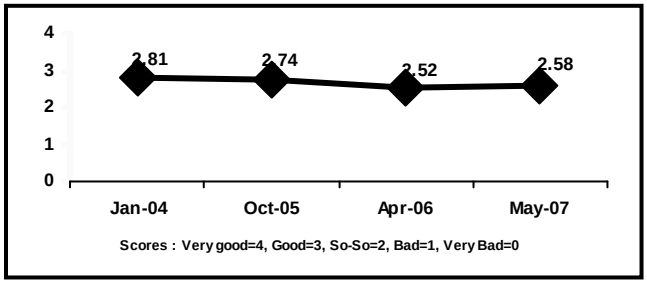
Year	Total No. of Patients
Y2003	71816
Y2004	98485
Y2005	110432
Y2006	143364

7.10 Quality of services offered

Patient Satisfaction Surveys for the outpatients and inpatients separately were conducted to make an independent assessment of the patient's satisfaction at five levels, namely, DHM, DHF, CH/BH and PHC comprising of all the 34 Project facilities (spread over 9 districts). Satisfaction has been measured across the below mentioned five key parameters and has been analyzed in three ways- for all patients taken together, for the poor and for the women.

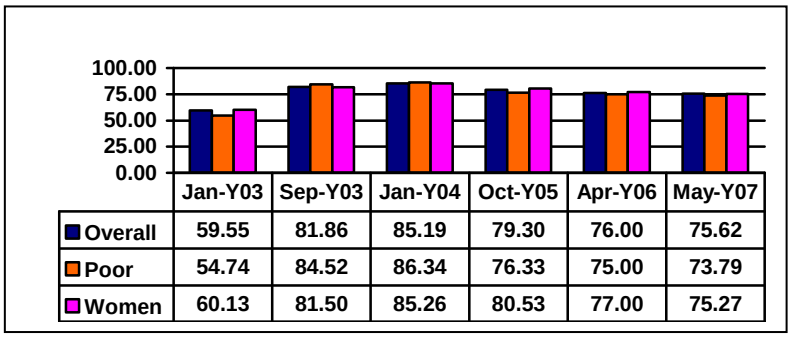
1. Behavior of the Staff

A trend analysis of the patient's perception towards behavior of the staff has been consistently reported to be good (average score being around 88 percent) during all the six rounds of Patient Satisfaction Survey.



2. Behavior of the Doctor

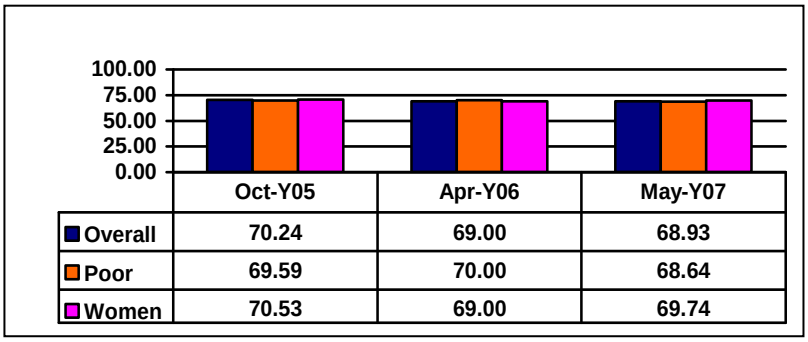
A trend analysis of Doctor's behavior shows that it has been consistently reported to be good (average score being around 81 percent) during all the rounds of Patient Satisfaction Survey.



	Jan-Y03	Sep-Y03	Jan-Y04	Oct-Y05	Apr-Y06	May-Y07
Overall	59.55	81.86	85.19	79.30	76.00	75.62
Poor	54.74	84.52	86.34	76.33	75.00	73.79
Women	60.13	81.50	85.26	80.53	77.00	75.27

3. Availability of services

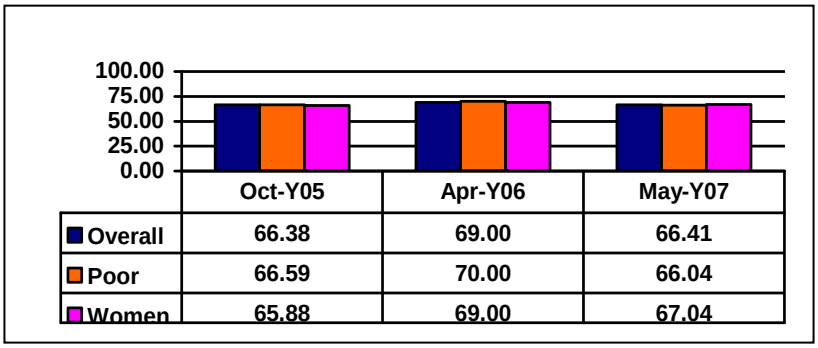
A trend analysis of the overall satisfaction with the services received shows that on an average 72 percent of the patients were found to be satisfied considering the proportion of patients who got all prescribed medicines in required quantity and proportion of advised patients who got all their tests done in the hospital.



	Oct-Y05	Apr-Y06	May-Y07
Overall	70.24	69.00	68.93
Poor	69.59	70.00	68.64
Women	70.53	69.00	69.74

4. Cleanliness of the Hospital

A trend analysis of the patient's perception regarding the cleanliness of facilities has remained more or less the same over the years.



	Oct-Y05	Apr-Y06	May-Y07
Overall	66.38	69.00	66.41
Poor	66.59	70.00	66.04
Women	65.88	69.00	67.04

8. Lessons Learnt

Several lessons were learned and will thus serve as an important tool for future State health Projects and Programs. Below mentioned are some of them:

8.1 The PIP was not designed as per the specific needs of Uttarakhand state and as well as the issue of sustainability of best practices learned as it was bifurcated from Uttar Pradesh PIP.

8.2 The health systems project needs to be integrated part of organogram and management of Medical Health & Family Welfare, especially DGMH.

8.3 The coverage of Project was only limited to a pilot of 35 health facilities, hence the outcome was diluted in view of huge number of remaining facilities and thousands of sub centers not covered under the Project.

8.4 Though major initiatives were taken in strengthening of health services, improving quality and building capacity, yet little efforts were made in areas of Organizational development and Human resource management.

8.5. Strongly felt that for the success of health system development project especially the follow on project the entire procurement planning, formation of Project Management Unit, its linkages and organogram, deployment of human resources and other systems should be in place so that maximum benefits are reaped from the first year of the project implementation.

8.6 There is a need for equipment placement planning as per the availability of human resources and clinical expertise available.

8.7 The Project has succeeded in providing preventive & limited curative healthcare services to 5 disadvantaged blocks with the help of NGOs. It is desirable that these services continue without interruption and more NGOs, particularly in the remote areas, or the areas where capable NGOs are available be roped in. There is a need to sustain this intervention by State government budgetary provision managed by DGMH.

8.8. Though the Chikitsa Prabandhan Samitis were formed in 29 big hospitals and 49 CHCs, it needs to be scaled till the PHC level and capacity building support needs to be provided.

8.9. First phase of Project concentrated only on strengthening the infrastructure of hospital buildings though there is urgent need to look into the residential accommodation of Medical & Paramedical staff at the health facility campus only.

8.10. More communication and automation support need at health facility for proper management of health programs.

8.11. A performance based disbursement mechanism could be a better approach where benchmarks with well-defined cost are linked with disbursement.

8.12. Currently, the State has little backup on the health care requirements arising from Road accidents, Adventure sports, Natural disasters (earthquakes, landslides, flash floods, forest and building fires), Tourists and Pilgrims. In the first phase of the project, the above aspect did not receive sufficient attention but with the emergence of 108 EMRI there is opportunity to develop a comprehensive plan for the state.

8.13. With the advent of National Rural Health Mission (NRHM), there is need to work within the framework of NRHM in the next follow on project.
8.14. Though the project has made significant contribution towards overall improvement in the health scenario of the State, but still there is an urgent need to pay attention to policy and strategic planning issues and district level strengthening. In view of this follow on project needs to concentrate on institutional strengthening through structural, financial & functional reforms and governance issue.
8.15 With the relative success of Bio Medical Waste Management program in the Project facilities, this needs to be implemented in all health facilities of the State.
8.16. The Officers deployed in the Project should have a fixed tenure posting for minimum of three years.

9. Sustainability of Project Innovations
There have been areas under Project that need to be mainstreamed within the Directorate to ensure their continuity when the present credit is closed. While some innovations such as the BPL reimbursement of facilities would now be brought under the new insurance scheme for BPL patients, there are other areas such as NGO contracting, HMIS, Personnel Information System (PIS), Quality Assurance, Maternal death audits and Bio-Medical Waste Management that remain to be fully brought under the Directorate.
9.1 State government's commitment: For health sector reforms and development the State has notified its Health & Population Policy in 2002 and initiated several institutional and policy reforms thereafter.
9.2 Institutional sustainability: A unified structure for management and administration of NRHM including health systems and other externally funded activities is needed for long term sustainability of health system development initiatives.
9.3 Financial sustainability: Though the annual budget provisions for health sector has gradually grown over the last seven years of State existence, yet there is need to improve yearly expenditure status also.

10. Evaluation of the Performance of the Bank & Borrower

A. Bank

10.1 Financial lending: Satisfactory
10.2 Supervision: The Bank has been indeed a guiding factor for improving the health scenario of the State and its contributions have been noteworthy.
The technical assistance provided by the Bank through Supervisory missions is not adequate in the sense that it does not provide any on the field level technical expertise for the interventions under implementation. These missions are more focused towards review of the project. Practically the entire technical assistance to project is provided by Consultants hired not directly from the Bank staff. There is a need to infuse some fresh thinking in the supervisory mission of the Bank making them more a technical assistance side rather than on review side.
10.3 Effectiveness of relationship between the Borrower & the Bank: The sharing of intense knowledge and learning experiences from both the sides has been possible only due to the cordial relationship, positive attitude, liberty for interaction at any point of time, intense desire for commitment to healthcare services and strong involvement in conceptualizing innovative ideas for serving the people of the state.
10.4 Comments on Bank staffs draft ICR: The ICR team has initiated the process of preparing the ICR and has visited the State once. The report provides the data and analysis to substantiate assessments and identifies lessons learnt from implementation.
10.5 Sustainability measures: The efforts to sustain the entire components undertaken during the Project phase have been initiated with the State Government as it is fully committed to the reforms initiated under the Project.
10.6 Overall Bank Performance: Satisfactory

B. Borrower

10.7 Preparation: Satisfactory
The Borrower actively participated in preparing and facilitating preparation of important inputs for the design of the Project. The Project start up was delayed due to bifurcation process of the state from the erstwhile state of Uttar Pradesh.
10.8 Government Implementation Performance: Satisfactory
The Government showed strong commitment to health sector reforms. Fund flows under the Project were largely smooth, except for some specific instance of delays due to retroactive extension of the Project in year 2008.
10.9 Implementing Agency: Keeping in mind, a newly created state with the existing difficult geographical situation and deficient skilled human resources, the overall performance of the Project is Highly Satisfactory.

10.10 Financial achievement:

Out of the total revised cost of INR 868.91 million, expenditure incurred till May 31, 2008 is INR 805.67 million (92% of the project cost). The total amount of expenditure and commitments as on date are INR 845.41 million (97% of the revised project cost). The budget allotted for the Year 2008-09 is INR 60 million. The bank balance as on 31st March 2008 is INR 100 million and out of this amount INR 97.8 million has been spent in April and May 2008.

Statement Showing Category wise project cost and Expenditure up to May 2008 (In INR million)

No.	Category	As per revised project	Expenditure up	Balance	Expenditure* %
1	2	3	4	5=(3-4)	(4/3)
1-A	Civil	358.05	356.53	1.52	100%
2-A	Goods	239.52	196.86	42.66	82%
3-A	Consultancy	175.82	153.11	22.71	87%
4-A	Operating Cost	95.54	99.35	-3.81	104%
Total		**868.91**	**805.67**	**63.24**	**93%**

* As can be observed from above, 1-A and 4-A, the project has expended the entire allocated amount. However as per World Bank policy an overdraw of 15% in these categories is allowed before requiring reallocation.

This refers to contracts that has been signed and awarded.

10.11 Disbursements: Of the revised allocation of SDR 10.54 million, the amount disbursed is SDR 9.38 million, which represents 89% (74% in Nov 2007) of the revised allocation. The Project has claimed expenditure incurred till May 2008. The Project is confident that the entire IDA credit would be used by the closing date.

10.12 Overall Borrower Performance: Satisfactory

Annex 8. Comments of Cofinanciers and Other Partners/Stakeholders

N/A

Annex 9. List of Supporting Documents

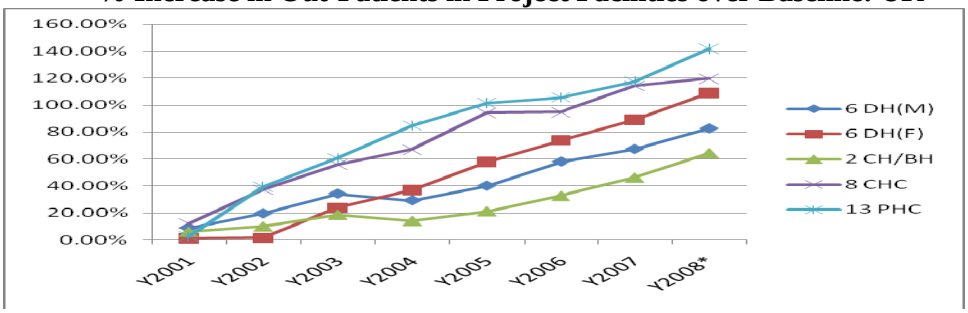
Project Concept Note, February 2000
Project Appraisal Document, March 2000
Annual Performance Surveys – 2000-2005, UPHSDP; 2000-2008, UKHSDP.
India: Policy and Finance Strategies for Strengthening Primary Health Care Services, May 1995
India: New Directions in Health Sector Development at the State Level: An Operational Perspective, February 1997
India: Uttar Pradesh – From Fiscal Crisis to Renewed Growth, September 1998
UP- Public Expenditure Analysis: The Health Sector, April 1999
UP and Uttarakhand Health Systems Quality Review of Civil Works and Equipment; September 2008
Aide Memoires (May 2001, Nov 2001, July 2002, Nov 2002, Apr 2003, Nov 2003, May 2004, Jan2005, Nov 2005, March 2006, Sep 2006, May 2007, Dec 2007, Sep 2006, June 2008, Dec 2008), Back-to-Office Reports, and Implementation Status Reports

Annex 10. Discussion on achievement of PDO indicator 1 for UP

The detailed discussions on achievement of PDO indicator 1 (summarized in Section 3.2) is given below:

Total Out-patients (OP attendance): In UP, user charges were drastically reduced in 2003, which lead to a huge increase in utilization of project facilities. Since this increase could not be attributed completely to the project, the utilization numbers were standardized to correct for the impact of reduced user charges. OPD figures, standardized to discount the effect of reduced user charges, met the targets set at all levels of facilities. The observed percentage increase/decrease with respect to yearly target from 2001-2005 were 98%, 103%, 109%, 100% and 102% respectively (source: APS 2005). A comparison with non-UPHSDP facilities[10], it was found that the total OPD incidences ere substantially higher in project as compared to non-project hospitals.

% Increase in Out-Patients in Project Facilities over Baseline: UK



In UK, total outpatient attendance grew by about 92% during the project period, and reached quite close to the end of project target in 2006 itself. Overall, there was a cumulative annual growth rate (CAGR[11]) of 8.5% in outpatients. The annual increase was higher at district level facilities (DH(M)s, DH(F)s and CH/BH) as compared to rural facilities (especially CHCs), due largely to issues related to manpower availability.

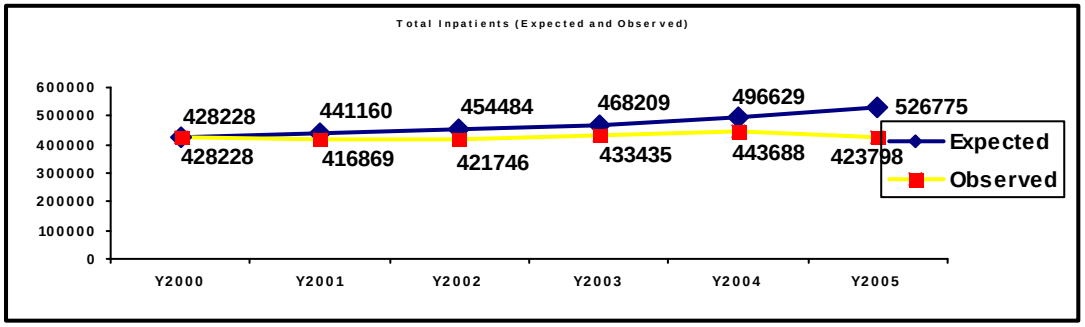
Women Out-patients: In UP, at the baseline, about 19% of outpatients and 12% of in-patients were poor; and 41% of outpatients and 36% of in-patients were women. Standardized numbers showed that total OPD attendance for women increased by about 16.5% over the project period, with greatest increases at the CHC and PHC levels, and significant decline at the DH(F). However, women's OPD attendance as a proportion of total attendance at the end of project was 47.1% against a target of 50% and a baseline of 49.7 (year 2000). The comparison of project and non-project facilities showed that the project has made a significant impact, with a 39% difference between the total women's use of project and non-project facilities.

In UK, the share of women in total outpatients increased from 47.8% at baseline to 54.7% in 2008, over the end of project target of 52%.

Total In-patients: In UP, the overall IP numbers did not meet the targets set for any of the project years. The shortfall can largely be attributed to lack of doctors in the facilities. This was aggravated by systematic transfers of doctors, with the exception of super specialists, who had served more than 10 years in any particular district, based on a Court Order passed in 2003, to discourage private practice by the doctors. This has had a hugely negative impact, with many doctors opting to quit the service.

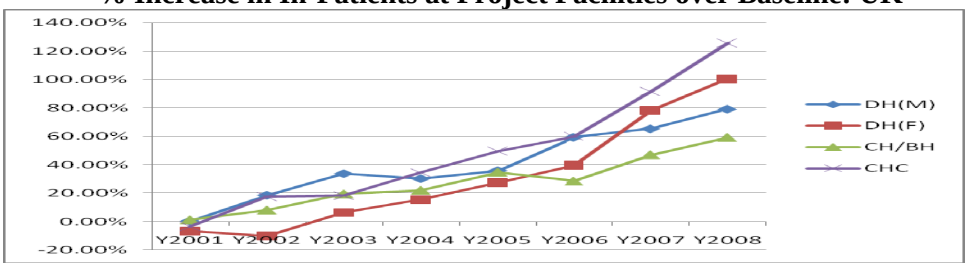
[10] 6 each of DH(M), DH(F), CHC and PHC were compared.
[11] Year on year growth on a cumulative basis

Total In-Patients by year: UP



In UK, there was a steady increase in IP admissions over the project period at all levels of hospitals, with a CAGR of 8.31% overall. The overall CAGR value was higher in project facilities, except for CHCs, as compared to non-project facilities (source: APS 2008). When coupled with increases in BOR, the increase in IP indicators is quite impressive. The District Hospitals (Male/ Female) (DH (M) s and DH (F) s) have exceeded the end of project target, while the CHCs have come close to the target of 50% even if they faced paucity of doctors and nurses at the facilities.

% Increase in In-Patients at Project Facilities over Baseline: UK



Women In-patients: In UP, there was a slight increase between 2000 (baseline) and 2002 in the proportion of women in-patients from 57.2% to 58.4%; this was well beyond the target set, largely because the targets were unrealistically low (the end-of-project target of 50% was lower than the baseline)[12]. Women made up a smaller share of in-patients in the comparable selected non-project hospitals selected for the survey during 2005, at 55.3%.

In UK, women in-patients constituted 68% of all in-patients, ahead of the end of project target of 64%.

Poor patients: Unfortunately, UPHSDP was not able to develop a reliable method for measuring the number of poor patients visiting project facilities. Although services were being provided free of cost to those perceived to be poor, or those carrying the white ration card issued to below poverty line (BPL) patients, there were persistent problems because not all BPL patients possessed the ration card, and provision of free service depended on funds availability at the facility and availability of drugs. As mentioned elsewhere, this problem is seen across all states in India and is not specific to UP/ UK. The MTR recommended that a special survey be conducted to determine use of facilities by the poor, which was not done.

In UK, as in UP, routinely collected statistics did not include a measure for tracking the number of

[12] The baseline figures were revised in 2003 (at MTR), mostly in terms of the absolute number of outpatients and inpatients, from what was given in the Project Implementation Plan, because of bifurcation of the state and errors in computation during the initial exercise. However, the APS shows that for indicators like share of women patients, the targets in terms of percentages were lower than that of the baseline in UP.

poor attending project hospitals. For the first time in the country, a policy decision was taken by the state to reimburse the cost of treating BPL patients. A plan was prepared for 0.62 million BPL households with the objective of distributing cards to the beneficiaries. The APS analyzed the share of free patients from the available records at project facilities (this data should be used with caution since they were not separately or systematically recorded), and found that only about 1.7% of OPD received free service at DH (M) in Y2006; 1.1% in DH (F); 1.4% at CH/BH; 6.5% at CHCs and 6.3% at PHCs.

Institutional Deliveries: In UP, the number of institutional deliveries declined by 5% between 2000 and 2001 – the targets for institutional deliveries had envisaged a 10% increase between baseline and mid-point and a further increase of about 36% in the second half of the project. Although deliveries at CHCs and PHCs increased over the project period, this could not compensate for the significant shortfall at DH (F). The most likely explanation for this is the acute shortage of women doctors, particularly after the implementation of the Court Order on transfer of doctors. In the extension period, particularly, districts did attempt different mechanisms to address vacancies through, for example, hiring of lady AYUSH doctors. An additional issue is that contract doctors in the DH (F) are not authorized to do surgeries, which lowers the effectiveness of these facilities as referral centers. Given the huge on-going increase in demand for institutional delivery under the Janani Suraksha Yojana, this is an issue of serious concern, since the poor might then be forced to seek services in the private sector.

In UK, institutional deliveries surpassed the end of project target of 17,000 deliveries, with 30,193 deliveries taking place at project hospitals in FY2008, representing a CAGR of 13.1% (well beyond the targeted 8.1% increase). This was most likely due to the JSY incentive scheme, and indicates that the system was capable of responding effectively to increased demand that resulted from that scheme.

Bed Occupancy Rate (BOR): In UP, BOR declined across all project facilities between 2000-2005. There was an increase from 5.4% to 18.1% in CHCs; however, this was still well below the end of project target of 50%. Possible reasons for this are discussed above.

Patient Satisfaction Surveys (details in Section 3.6 and Annex 5 under Beneficiary Assessment discussions): To monitor and track improved access and quality of care to beneficiaries, four Patient Satisfaction Surveys (PSS) were conducted in UP between January 2002 and December 2005. Overall satisfaction with services received went up significantly from 1.97 to 2.56 o the 4-point scale.

In UK, six surveys were conducted in UK between January 2003 and May 2007. Overall satisfaction with services received has remained static across the period at about 2.7 on the 4-point scale.

Increased referral: Referral data was never reported on in either state, in keeping with the practice followed in the rest of the country.

Although the project in UP was reoriented in the extension phase (2006-08), the end-line study for the corresponding activities was not completed by project closure. The APS (for all 28 project districts) was also discontinued after 2005. Hence, additional analysis has been undertaken for key facility-level indicators (as per the original PDO indicator 1) in the 4 districts taken up during the extension phase in UP. The details are presented in Annex 10. The performance on key indicators has been mixed between the districts during the Extension phase, and between institutions within districts. Overall, institutional deliveries at DH (F) s have gone up, probably reflecting the availability of lady doctors/staff at these facilities. At CHCs and PHCs, there have been cases of substantial decline as well. OPD has declined at many of the facilities, with the exception of District Badaun. IPD has shown a growing trend, but this could also be due to extremely low utilization of inpatient services in these facilities prior to the project.

Annex 11. Performance analysis of indicators in project facilities of 4 agreed districts in UP between 2006 and 2008.

Since the project was reoriented in the extension period (2006 to 2008) to focus additionally on the 4 districts of Bahraich, Banda, Mainpuri and Badaun in UP and end-line for the reoriented project in this phase was not completed at project closing, the progress on facility-level indicators (as per the original PDO indicator 1) was assessed instead for these districts. The table below summarizes the performance of the facilities in these 4 districts as per the original PDO indicator 1:

Output indicators for Districts in Extension Phase - UPHSDP

Output Indicators - District Bahraich: % increase 2006-2008						
	DHM	DHF	CHC Kaiserganj	CHC Risia	PHC Fakarpur	PHC Jarwal
Institutional Delivery		105	44	76	256	113
OPD	-10	87	14	12	16	-8
IPD	34	109	344	538	295	144
Output Indicators - District Banda: % increase 2006-2008						
	DHM	DHF	CHC Narainee	PHC Mahua		
Institutional Delivery	-50	580	1606	No data		
OPD	32	1	91	-25		
IPD	57	418	140	1439		
Output Indicators - District Mainpuri: % increase 2006-2008						
	DHM	DHF	CHC Barnahal	CHC Karhal	PHC Ghirore	PCHC Karawali
Institutional Delivery	13	99	-38	4	-75	-38
OPD	14	-2	-43	-13	-34	-41
IPD	48	10	21	498	2864	-14
Output Indicators - District Badaun: % increase 2006-2008						
	DHM	DHF	PHC Usawan	CHC Bisauli	CHC Gunnaur	
Institutional Delivery		63	71	349	-62	
OPD	19	3.5	52.5	74	7.7	
IPD	21	4	180	No data	No data	

Source: District Reports to PMU/World Bank 2008

As can be seen, the performance on key indicators has been mixed between the 4 districts during the Extension phase, and between institutions within districts. Overall, institutional deliveries at DH (F) s have gone up, probably reflecting the availability of lady doctors/staff at these facilities. At CHCs and PHCs, there have been cases of substantial decline as well. OPD has declined at many of the facilities, with the exception of District Badaun. IPD has shown a growing trend, but this could also be due to extremely low IP utilization of these facilities prior to the project.