

HEALTH AND FAMILY WELFARE DEPARTMENT

3.2 Status of Medical Equipment, Buildings, and vehicles in hospitals/health centres and their utilisation in Health care services

Highlights

Health care services to the people of the State have been a priority item in the planning of social services by the Government of Assam. This was planned to be achieved by providing hospitals, community health centres, primary health centres, and dispensaries with well-equipped medical facilities in the districts/sub-divisions and in rural areas. During the successive five-year Plan periods, construction of district level hospitals, sub-divisional level hospitals and sizable number of community health centres, primary health centres and dispensaries were taken up but many of the buildings remained incomplete. A large number of health care institutes functioning from Government buildings, rented houses and other public houses were in a deplorable condition without facilities for drinking water, electricity and sanitation. Medical instruments, equipment and machines procured were either not optimally used or not utilised at all for different reasons. There were instances of delay in utilisation of equipment and many types of costly equipment with repairable defects remained unused for years. Transport infrastructure was poor as many departmental vehicles remained off road. As a result the intended health care services could not be made available to a large section of people.

- The State Government did not release Rs.109.59 crore (60 per cent) of the budgeted provision for construction and repair/renovation of health care buildings.

(Paragraph: 3.2.7)

- There were deficiencies in establishing health care institutes as per population norm. In six selected districts shortfall of 52 CHCs (60 per cent), 151 PHCs (44 per cent), and 394 SCs (19 per cent) indicated that there was inadequacy of infrastructure for rendering health care services to the people of the districts. Due to the shortage of CHCs and PHCs 45.30 lakh and 62.40 lakh people in these districts were deprived of getting health care facilities at their doorsteps and referral health care services.

(Paragraph: 3.2.8)

- Out of 2031 health care buildings in six selected districts 1093 (54 per cent; mainly sub-centres) were functioning from private accommodation. Only 938 health centres were in Government buildings of which 439 (47 per cent) were in dilapidated condition requiring major repair. In four Districts (Kamrup, Nagaon, Cachar, Barpeta) out of 1,617 health care institutes, there was no provision for water supply in 404 institutes (25 per cent), there was no power supply in 499 institutes (31 per cent) and there was no functional toilet in 502 institutes (31 per cent).

(Paragraph: 3.2.8)

- Construction of 314 health care buildings remained incomplete after incurring expenditure of Rs.33.67 crore even after the lapse of 5 to 37 years of taking up construction works. Of this, 122 buildings had been taken up for construction between 1967-68 and 1999-2000.

(Paragraph: 3.2.9)

- In Kamrup district five Community Health Centres and six Mini Public Health Centres constructed at a cost of Rs.5.72 crore between August 1999 and August 2004 could not be made operational till March 2005.

(Paragraph: 3.2.10)

- Out of 102 buildings constructed for up gradation of State Dispensaries to Public Health Centres, only 14 buildings were utilised as Public Health Centres and the remaining 88 buildings constructed at a cost of Rs.5.05 crore were still continuing as State Dispensaries.

(Paragraph 3.2.13)

- In five districts namely, Kamrup, Nagaon, Cachar, Dibrugarh and Barpeta against 231 sub-centres shown as constructed from IPP-IX only 202 sub-centres were actually constructed. Construction of 29 sub-centres at a cost of Rs.1.44 crore was doubtful.

(Paragraphs: 3.2.14)

- According to a survey conducted by the Government, out of 18,743 existing equipment in the different health care institutes of the State 7,812 equipment (42 per cent) were unserviceable. Though the majority of the equipment was assessed as repairable at an approximate cost Rs.88.90 lakh, the Department had not taken steps for their repair/replacement.

(Paragraph 3.2.22)

- Out of the fleet of 602 vehicles under the Health Department, 103 vehicles remained off the road due to lack of repair/replacement affecting badly the delivery of health care service. In 118 PHCs and 23 CHCs of five districts there were no vehicles for carrying high risk and other emergency patients to the nearest Government hospital.

(Paragraph: 3.2.26)

3.2.1 *Introduction*

Providing universal health care services to the people of the State is a priority item in the planning of basic health care services by the Government of Assam. The population of Assam, as per 2001 Census was 2.67 crore with a density of 339.61 people per square kilometre. For providing medical education and specialised and referral health care services, there are three major medical colleges and hospitals one each at Dibrugarh, Guwahati, Silchar and a Regional Dental College at Guwahati. In addition, there are four medical colleges under the indigenous systems of medicine (Ayurvedic-1 at Guwahati and Homoeopathic-3, one each at Guwahati, Jorhat and Nagaon) one Nursing College at Guwahati and three Pharmacy Institutes at Guwahati, Silchar and Dibrugarh. General health care and family welfare programmes (including Mother and Child Health and Reproductive Child Health) are provided through the network of the three medical colleges and hospitals, one state hospital (Mahendra Mohan Choudhury Hospital) at Guwahati, 21 district and three sub-divisional

hospitals, 100 community health centres (CHC), 610 primary health centres (PHC), 99 subsidiary health centres (SHC), 323 state dispensaries (SD) and 5,466 sub-centres (SCs)¹⁰.

The objective of establishing the health care units was to provide health care services in the entire State in a uniform manner in accordance with the common rules and guidelines issued by the Government.

The Department executed all construction works/repairs etc., through the Chief Engineer (CE), PWD (Buildings), Assam who is assisted by the Executive Engineers (EE), PWD (Buildings) in the districts and an EE, Medical College Construction (MCC) Division, Guwahati. Besides, health care buildings were also constructed under different health infrastructure projects like Assam Area Project (India Population Project-IX), Reproductive and Child Health Programme Project (RCH) etc., under the administrative control of separate societies.

3.2.2 *Organisational set up*

The Department of Health and Family Welfare headed by a Commissioner and Secretary implements all health care activities through the network of medical college and hospitals, district and sub-divisional hospitals, CHCs, PHCs, state dispensaries, sub-centres etc. The Commissioner and Secretary is assisted by a Joint Secretary and three Directors viz., Director of Health Services (DHS-General), Director of Health Services (DHS-Family Welfare) and Director of Medical Education (DME). In the districts, the Joint Director of Health Services (Jt. DHS) and Additional Chief Medical and Health Officers, Family Welfare (ACM & HO - FW), implement health care services.

3.2.3 *Scope of Audit*

The performance audit on the “Status of buildings, equipment and vehicles etc., and their utilisation in health care services” covering the five-year period of 2000-05 was conducted between April - June 2005. The study and test-check of records was carried out in the Health and Family Welfare Department (H & FWD) of the Government, two DHS, two medical colleges¹¹, one state hospital¹², four¹³ district hospitals (Nagaon, Diphu, Silchar, Barpeta) and records of CHCs, PHCs, State dispensaries, sub-centres available with the Jt. DHS and ACM & HO of six¹⁴ selected districts covering 34 CHCs, 194 PHCs, 1,691 SCs. In addition, records of Central Drug Warehouse, Narangi and Regional Drug Warehouse, Nagaon were also test-checked.

¹⁰ Sub-centre (Family Welfare): 5,109
Sub-centre (Medical): 357
 5,466

¹¹ Assam Medical College & Hospital (AMCH) Dibrugarh and Guwahati Medical College & Hospital (GMCH)

¹² Mahendra Mohan Choudhury Hospital, Guwahati.

¹³ In Kamrup and Dibrugarh there were no District Hospitals.

¹⁴ Kamrup, Nagaon, Karbi-Anglong, Cachar, Barpeta and Dibrugarh

3.2.4 *Audit objectives*

The objectives of the performance audit were to find out whether:

- Hospitals and health care units were equipped with the three types of basic infrastructure viz., buildings, equipment and vehicles,
- Construction of hospital buildings, repair and renovation of health centres as envisaged in successive Annual Plans have been achieved,
- Equipment provided to hospitals and health care units were in good working condition and were providing needed health care facilities to the people at their door steps, and
- Vehicles provided were available at the hospitals and other health care units for normal and emergency service deliveries.

3.2.5 *Audit criteria*

- Number of health care centres in accordance with prescribed norms.
- Status of buildings with required basic facilities for housing hospitals and health care centres.
- Availability of essential equipment in health care centres.
- Vehicles available for running health care centres in the State.

3.2.6 *Audit Methodology*

The selection of samples for data collection, evidence gathering and evaluation, was done on a representative basis. Six (26 *per cent*) out of 23 districts, covering a population of 34 *per cent* were selected based on their geographical location and population density and after ensuring that the sample districts were large enough to include all significant characteristics of the population. The selected districts also included one out of two hill districts of the State. Records have been checked in the implementing units located in these districts on the basis of sample data that is representative of the population.



Audit findings

3.2.7 Budget provision and funds released

The budget provision and fund released in respect of building component of health schemes as furnished by the Chief Engineer (Building) Assam are shown in **Appendix – XX**.

Against the provision of Rs.183.76 crore during the period of 2000-05, the Department released only Rs.74.17 crore (40 *per cent*). Reasons for non-release of balance Rs.109.59 crore (60 *per cent*) of budgeted provision were neither furnished by the Department nor available on record. Short release of funds had resulted in non-completion of large number of buildings and consequential deficiencies in health care infrastructure.

3.2.8 Deficient infrastructure

According to norms for setting up of health care centres, one SC is required to be set up for a population of 5,000 (3,000 in case of hills), one PHC for a population of 30,000 (20,000 in case of hills) and one CHC for a population of 1,20,000 (80,000 in case of hills). Against the required number of CHCs, PHCs, SCs, to be set up in the State, the Department had set up lesser number of these units. The resultant shortfall under CHC/PHC sector ranged from 29 to 53 *per cent* as shown in Table-1 below:

Table-1 (For Assam)

	Projected numbers to be set up as per norms (Target)	Nos in position as per statement submitted by DHS (General)	Shortfall	
			Numbers	Percentage
CHCs	214	100	114	53
PHCs	855	610	245	29
SCs	5133 FW	5109 FW	24	0.47

Source: Departmental records.

Table-2 (For six test-checked districts)

District	Health care units	Projected numbers to be set up as per norms (Target)	Nos in position as per statement submitted by DHS (General)	Shortfall	
				Numbers	Percentage
Kamrup	CHCs	21	9	12	57
	PHCs	84	52	32	38
	SCs	503	355	146	29
Nagaon	CHCs	19	9	10	53
	PHCs	77	34	43	56
	SCs	463	404	59	13
Karbi Anglong	CHCs	10	5	5	50
	PHCs	41	34	7	17
	SCs	271	103	168	62
Cachar	CHCs	12	1	11	92
	PHCs	48	21	27	56
	SCs	289	272	17	6
Barpeta	CHCs	14	5	9	64
	PHCs	55	37	18	33
	SCs	328	326	2	1
Dibrugarh	CHCs	10	5	5	50
	PHCs	40	16	24	60
	SCs	231	231	--	--
Total	CHCs	86	34	52	60
	PHCs	345	194	151	44
	SCs	2085	1691	394	19

The total population in the six selected districts was 99.20 lakh according to the 2001 census. As against the norm for setting up of 86 CHCs, 345 PHCs, and 2,085 SCs, actual numbers of existing health care units in these districts were 34 CHCs, 194 PHCs and 1,691 SCs. Shortfall of 52 CHCs (60 *per cent*), 151 PHCs (44 *per cent*) and 394 SCs (19 *per cent*) indicated inadequacy of health care infrastructure in these districts with resultant poor coverage of the basic health care needs of the people. Due to the shortage of PHCs, 45.30 lakh (17 *per cent*) of the population were deprived of getting health care facilities at their doorsteps. Again due to the shortage of CHCs, 62.40 lakh (23 *per cent*) of the population failed to avail referral health care services.

A study carried out in the six selected districts revealed that out of the existing 2,031 health care institutes (including 112 State dispensaries), 938 institutes were functioning from Government buildings, 976 from rental accommodation and 117 from accommodation provided by the public. Out of 938 Government buildings, 439 buildings are in dilapidated condition requiring major repairs, while another 220 buildings required minor repair. Information furnished by four districts (Kamrup,

Nagaon, Cachar, Barpeta) revealed that out of 1,617 health care institutes in these districts, in 404 institutes (25 *per cent*) there was no provision for water supply, there was no power supply in 499 institutes (31 *per cent*) and there was no functional toilet in 502 institutes (31 *per cent*). Similar information was not furnished by Dibrugarh and Karbi Anglong though called for. The details are indicated in Table-3 below:

Table 3

Name of the District	Total number of Institutes	In Government Building	In rental accommodation	In private accommodation	Requiring Major repair	Requiring Minor repair	Water supply facility not available	Electricity facility not available	Toilet facility not available
Kamrup	461	253	142	66	184	71	229	375	376
Nagaon	477	207	270	NA	40	61	115	115	117
Cachar	299	118	145	36	47	39	2	2	6
Karbi-Anglong	149	117	32	NA	94	NA	NA	NA	NA
Dibrugarh	265	109	156	NA	55	26	NA	NA	NA
Barpeta	380	134	231	15	19	23	58	7	3
Total	2031	938	976	117	439	220	404	499	502

Source: Department records.

Besides, as per norm there should be provision for beds for indoor patients in PHCs (6-10 beds), CHCs (30 beds) and State Dispensary/State Health Centres (1 bed). However it was found that in 160 health centres (PHCs, CHCs, SD/SHC) in five selected districts (other than Nagaon) there were no beds for indoor treatment.

The Joint Directors of Health Services in five selected districts (other than Dibrugarh), in reply to the audit query, intimated that provision of furniture was inadequate in all health care institutes of the respective districts.

Thus, apart from shortages in health care units in the districts test-checked, the existing units too lacked basic infrastructure like proper buildings and beds.

3.2.9 *Unfruitful/wasteful outlay on incomplete buildings*

The DHS (General) and the CE, PWD, (Buildings) had not furnished information on buildings remaining incomplete. Compilation of the quarterly progress reports showing position up to June 2004 submitted by the EEs, PWD (Buildings) divisions to the CE, disclosed that 314 works taken up during 1967-68 to 2003-04 remained incomplete in the entire State (**Appendix-XXI**). Of these, 122¹⁵ works were taken up between 1967-68 and 1999-2000 with approved estimated cost aggregating Rs.54.92 crore. The works remained incomplete, as of June 2004, after incurring expenditure of Rs.26.83 crore. The reasons for non-completion of the buildings even after the lapse of five to 37 years were mainly due to paucity of funds as stated by the concerned EEs.

Scrutiny of progress reports of June 2004 revealed that 192 works with aggregate approved estimated value of Rs.22.37 crore taken up between 2000-01 and June 2004 remained incomplete, as of June 2004, after incurring expenditure of Rs.6.84 crore. Thus, buildings for 165 PHCs, 66 CHCs, 5 two hundred bed hospitals, 11 hundred bed hospitals, 49 State Dispensaries and 18 Sub-centres remained incomplete. The

¹⁵ 62 PHCs + 25 CHCs + 5 (200 bed hospital) + 11 (100 bed hospital) + 4 state dispensaries + 15 medical sub centres = 122

reasons for non-completion of works were attributed mainly to non-receipt of funds as it was evident that only 40 *per cent* of budget provision was released to the Department.

Thus, the investment of Rs.33.67 crore (Rs.26.83 crore + Rs.6.84 crore) on buildings that remained incomplete even after the lapse of five to 37 years was unfruitful.

3.2.10 Non-utilisation of completed buildings

Records of Jt. Director of Health Services, Kamrup disclosed that five CHCs¹⁶ and six Mini Primary Health Centres (MPHCs)¹⁷ constructed between August 1999 and August 2004 at a cost of Rs.5.72 crore remained unutilised as of March 2005. Reasons for non opening of CHCs and MPCHs in the newly constructed buildings were not on record.

Thus, the infrastructure created at a cost of Rs.5.72 crore out of the State's scarce resources turned into non-performing assets and the Government's commitment of providing doorstep health care services to the targeted population was not realised.

3.2.11 Delay in execution of works

During the period from 2000-01 to 2004-05 EE, Medical College Construction (MCC) division took up 19¹⁸ works at an estimated cost of Rs.16.69 crore. Of these 19 works, 13 works were completed (December 2004) at a cost of Rs.11.97 crore, of which 11 works were completed with delays ranging from nine to 55 months. The remaining six works estimated to cost Rs.4.67 crore were in progress (March 2005) with an expenditure of Rs.0.51 crore even after the lapse of eight to nine months from the due date of completion. The reasons for delay were attributed to late administrative approval, paucity of funds and failure of the contractor to execute the works in time.

Absence of infrastructural facilities would have had an adverse impact on the effectiveness of the health service units.

Buildings under externally aided projects

3.2.12 Operational period and provision of funds

Assam Area Projects (AAP) under India Population Project –IX (IPP–IX) is an externally aided project implemented in Assam from 20 September 1994 to 31 December 2001 for creation of infrastructure for family and child welfare during the project period of 1995-2001 with an outlay of Rs.144.37 crore, of which the civil

¹⁶ CHCs-Goroimari(Rs.222.02 lakh),Nagarbera(Rs.107.23 lakh),Bamunigaon(Rs.50.00 lakh),Hajo(Rs.76.69 lakh),Azara(Rs.39.65 lakh).

¹⁷ MPHCs-Bondapara(Rs.15.00lakh),Tupamari(Rs.9.75 lakh),Uttarghilabari(Rs.17.71 lakh),Gamerimura(Rs.13.86 lakh),Puranburkha (Rs.9.80 lakh),Brindaban(Rs.10.33 lakh)

¹⁸ GMCH complex:10 Nos + Government Ayurvedic College:3 Nos+ Regional Nursing College :3 Nos+ Regional Dental College :3 Nos=19 Nos

works (building construction) component comprised Rs.87.43 crore. The following audit observations are made in this regard (paragraphs 3.2.13 to 3.2.16).

3.2.13 *Upgradation of state dispensaries to PHCs – non-utilisation/under utilisation of assets created*

To augment health care facilities, Project Director (PD) AAP constructed additional rooms/buildings in 102 State Dispensary buildings for upgrading them to the status of PHC buildings at a cost of Rs. 5.86 crore. Of these newly constructed buildings, only 14¹⁹ buildings were utilised as PHCs and the remaining 88 buildings constructed at a cost of Rs.5.05 crore continued to function as State Dispensaries thereby depriving the people of in-patient treatment facilities. Thus, assets created at a cost of Rs.5.05 crore remained underutilised and did not serve the intended purpose for which the expenditure was incurred.

Test-check further revealed that out of 14 SDs upgraded to PHCs, two such PHCs (Deochar and Bahjani PHC) in Kamrup district were functioning without sanctioned posts of doctors and para medical staff required for a PHC. Thus, in spite of having the infrastructure, the intended purpose was not served in these two PHCs due to manpower constraint.

3.2.14 *Discrepancy in construction of sub-centres*

The PD, AAP spent Rs.39.70 crore during 1995 to 2001 towards construction of 800 sub-centres (FW), of which 231 SCs were shown to have been constructed in five²⁰ out of six selected districts as revealed from the Project Implementation Completion Report (PICR) under IPP-IX. But, according to the report (May 2005) of the Additional Chief Medical & Health Officer (FW), there were only 202 SCs in these five districts constructed from AAP funds. Thus, there was a discrepancy of 29 SCs between two sets of reports as shown in Table-4 below:

Table-4

(Rupees in lakh)

Sl. No.	District	Nos. constructed as per IPP-IX record	Nos. constructed as per information of ACM&HO	Difference	Average cost of construction	Cost involved
1	Kamrup	59	55	4	4.96	19.84
2	Nagaon	49	44	5		24.80
3	Cachar	47	36	11		54.56
4	Dibrugarh	38	30	8		39.6
5.	Barpeta	38	37	1		4.96
	Total	231	202	29	4.96	143.84

Source: Departmental records.

In the above five districts, against 231 sub-centres shown as constructed from IPP-IX, the Addl. CM & HOs of the respective districts, who are the custodians of the

¹⁹ Kamrup : 3 + Morigaon : 1 + Korajhar : 2 + Darrang : 1 + Sonitpur : 1 + Lakhimpur:1 + Golaghat : 1 + Cachar 3 + NC Hills : 1 = 14.

²⁰ Karbi Anglong did not prepare PICR

sub-centres, stated that only 202 sub-centres were actually constructed. Thus, construction of 29 sub-centres was shown in excess by Project Director, IPP-IX. The two contradictory statements involving expenditure of about Rs.1.44 crore need to be investigated by the Government. The fact remained that these buildings were not available for utilisation in health care services as per records of the Addl. CM & HOs.

3.2.15 *Doubtful expenditure*

The PD, Reproductive Child Health (RCH) received (May 1998) Rs.2.30 crore from Government of India for minor works/repair of PHCs with the stipulation to complete the works by November 1998. The PD RCH disbursed (September 1999) Rs.2.20 crore to the executing agency viz., PD, AAP (IPP – IX), after a delay of 16 months. The PD, AAP completed the repair works (138 nos in 22 districts) between July 2000 and November 2001 at a cost of Rs.2.10 crore and submitted (November 2001) accounts showing savings of Rs.29.99 lakh (principal Rs.9.35 lakh + bank interest Rs.19.31 lakh + sale proceeds of bid documents Rs.1.33 lakh).

In March 2002, the PD, AAP (IPP-IX) stated that the balance amount of Rs.29.99 lakh had been utilised for additional minor works under RCH. Neither the project review status paper (IPP-IX), nor the Project Implementation Completion Report (24-12-2001) disclosed any account of additional work taken up under RCH except the 138 minor works executed earlier at a cost of Rs.2.10 crore. Though called for, no record in support of the expenditure of Rs.29.99 lakh could be shown. Thus, actual utilisation of Rs.29.99 lakh and utilisation of the infrastructure stated to be created could not be vouchsafed in audit.

3.2.16 *Construction of Regional Drug Warehouse at Nagaon-excess expenditure and other irregularities*

The construction of Regional Drug Warehouse at Nagaon was taken up (August 2000) at the sanctioned estimate of Rs.1.31 crore. The PD, AAP awarded (August 2000) the work to a contractor at a tendered value of Rs.1.41 crore. The contractor completed the work in July 2001 and the PD paid Rs.1.62 crore to the contractor despite the contractor not having executed certain items of work in the estimate worth Rs.1.95 lakh. Thus, the PD had incurred an irregular excess expenditure of Rs.31.25 lakh (Rs.162.49 lakh – Rs.131.24 lakh) over the sanctioned estimate without obtaining any approval of the competent authority even though the expenditure exceeded the sanctioned amount by 24 *per cent*. Further, the Jt. DHS, Nagaon reported (October 2002) that the building and shutters required immediate repair. Subsequently, the power and water supply had been cut off as the power transformer went out of order in September 2003. Since the Zonal Warehouse caters to the needs of five districts for drugs it has been observed that the storage of life saving drugs and supply thereof to five districts (Nagaon, Jorhat, Sonitpur, Golaghat and Karbi Anglong) had been badly affected because of defective buildings and non-functioning of electric and water installations.

Equipment

3.2.17 Fund receipts and utilisation

The details of funds released by North Eastern Council (NEC)/State Government and utilised by the implementing agencies during 8th, 9th and 10th Five Year plan period (up to September 2004) against Revenue Head of nine schemes are shown in **Appendix – XXII**.

It would be seen from **Appendix-XXII** that the State Government did not release Rs.3.48 crore (33 *per cent*) out of Rs.10.49 crore released by the NEC during the 8th and 9th Five Year Plan period to the implementing agency. Besides, the implementing agency too failed to utilise Rs.65.80 lakh (nine *per cent*) out of funds released by the State Government during the corresponding plan periods.

Short release of NEC funds by the State Government and partial utilisation of released funds had retarded the pace of modernisation of hospital equipment as well as repair/upkeep of existing equipment resulting in sub-standard health service benefits to the targeted beneficiaries.

3.2.18 Performance of equipment/machinery

Equipment and machinery were installed in medical colleges and Mahendra Mohan Choudhury (MMC) Hospital, Guwahati for optimisation of medical and health care services to the people at large. In these institutes sophisticated equipment like CT Scan, Ultrasound, X-ray and Auto analyzer were available for health care services. A test-check of records in these institutes revealed that records showing numbers of patients prescribed for these tests were not maintained. However, average percentage of enrolled patients who had undergone these tests during last five years, indicated that a small percentage of the patients availed of the diagnostic test facilities as indicated in Table-5 below:

Table-5

Sl. No.	Name of Hospital	Yearly Average enrollment 2000-05	Average No. and percentage of patients undergone tests during 2000-05							
			CT Scan		Ultrasound		X-Ray		Auto analyser	
			No.	Percentage	No.	Percentage	No.	Percentage	No.	Percentage
1	Guwahati Medical College Hospital	3,32,940	5169	1.55	5174	1.55	37,795	11.35	NA	NA
2	Assam Medical College Hospital, Dibrugarh	1,77,892	2385	1.34	5199	2.92	15736	8.85	7617	4.28
3	Mohendra Mohan Choudhury Hospital, Guwahati	1,08,759	Nil	Nil	758	0.70	5076	4.67	Nil	Nil

Scrutiny of stock books of equipment maintained in these hospitals revealed that a number of machines/equipment remained non-installed, out of order etc., as detailed below:

(a) X - Ray

Out of nine X-Ray machines procured for Radiology Department in AMCH Dibrugarh between 1989 and 2004, six were not functioning. Of the remaining three, the fluoroscope of one 300 MA Seimens X-Ray unit procured in 1995 was not working. Another X-Ray unit - 3 Arm Allenger procured in November 2004 was sent to the cardiology department on 6 January 2005. Thus, X-Ray wing of the Radiology Department in AMCH was practically working with two machines, one of which is a portable unit.

In GMCH, Guwahati, out of 13 X-Ray machines, eight were not working. The detailed particulars of machines were not indicated in the stock books, in the absence of which date of receipt, periodical repairs done could not be ascertained.

(b) Ultrasound machine

The AMCH, Dibrugarh had two ultrasound machines procured in 1996 and 2000. The Colour Doppler camera of the machine purchased in 1996 was not working since March 2000. The camera was repaired only in December 2004 after a delay of over four years during which period the machine remained non-functional. There were three ultrasound machines in GMCH and in case of two, date of receipt etc., were not available. The Colour Doppler of the machine received in March 1997 went out of order in February 1998, which was within the warranty period. Records did not indicate whether this was replaced or repaired. Logbooks were not maintained.

(c) CT Scan machine

One CT scan machine was installed in AMCH, Dibrugarh in May 1999 at a cost of Rs.1.55 crore but no logbook for the machine was maintained. The relevant scan registers produced to Audit showed that 2,518 cases were scanned during a span of 12 months²¹ of which 512 (20 *per cent*) patients were not even registered with the hospital. Superintendent, AMCH, Dibrugarh did not respond to the audit query in this regard. Thus, there was apparent misutilisation of the machines installed. The performance of the CT scan machine installed in GMCH was low in 2002-03 (3,601 cases) as compared to other years (4,286 in 2000-01 and 6,738 in 2004-05). In the absence of logbooks, actual performance of the machines could not be analysed.

(d) Auto-analyser

While the auto analyser could perform, on an average, 540 tests per hour, in AMCH an average of 21 tests only were performed per day during the last three years. In GMCH an Auto-analyser machine costing Rs.28 lakh was installed in the biochemistry department for providing 24-hour service, but it was working only for

²¹ From 8-6-2001 to 10-3-2002 and from 13-8-2003 to 31-10-2003.

five to eight hours per day. Shortage of manpower with technical know-how was stated to be the reason for underutilisation.

(e) Cardiac Monitor

In AMCH Dibrugarh a Cardiac Monitor System was procured in March 2000 at a cost of Rs.6.21 lakh. Subsequently, between March 2000 and September 2002 another 11 monitors were procured at Rs.3.09 lakh. Information furnished by Superintendent AMCH showed that during the last five years the monitors were utilised for only 12 patients when the average number of patients enrolled in the hospital during 2000-05 was 1,77,892. Thus, there was under utilisation of the equipment procured.

3.2.19 Obsolete/condemned equipment in the cardiology department

Test-check of stock books maintained in the cardiology department revealed that a number of equipment in the department were declared condemned (6-3-1998) and were handed over to the Superintendent, GMCH. The Superintendent, however, did not maintain any record of these obsolete instruments. The details are given in Table-6 below:

Table -6

Sl. No.	Name of equipment	Total nos as per stock entries	Period of receipt	Nos. of condemned	Dt. Of condemnation
1	ECG Machine	24	1988-1991	12	6.3.1998
2	Cardiac Monitor	10	NA	6	6.3.1998
3	Defabrillator	9	NA	2	6.3.1998
4	Ventilator	1	11.3.1980	1	6.3.1998

Source: Departmental stock books.

Non-maintenance of separate records for obsolete/condemned instruments was indicative of deficient store control and possibility of pilferages could also not be ruled out.

Further, in the same department it was found that the machines listed in Table-7 below were not working for want of repairs.

Table-7

Sl. No.	Name of machine	No.	Date of receipt	Date from which not working
1	Boyles apparatus	1	05.04.1990	24.1.2000
2	Image Intensifier System	1	1982	2.8.1993
3	Echo Doppler	1	22.10.1991	1995
4	ICU Monitor Unit (Central-1, Bedside – 6)	1	22.10.1991	24.1.2000

Source: Departmental stock books.

Efforts made to repair these machines were not on record. Failure to repair these costly machines adversely affected the performance of the department.

3.2.20 *Non-utilisation of equipment*

Test-check of records in the pathology department in AMCH, Dibrugarh disclosed that costly equipment as detailed in Table –8 below remained unutilised due to non-procurement of reagents for the tests.

Table-8

Name of instrument	Received on	Reagents received upto	Date from which remaining non-functional
Blood Gas Analyser with accessories (27 Nos.) UPS	26.08.1995 25.06.1998	18.12.2003	March, 2005
Spectrophotometer (Semiautomatic Auto analyzer)	14.12.1994	14.12.1994	1996
QBC-Reference-II Hematology Analyzer, QBC parlance blood parasite detection system	08.01.1998	N.A	2001

Source: Departmental stock books.

After establishment (March 2003) of the Hospital Management Society (HMS) and introduction of the system of realising the cost of pathological tests from the patients, procurement of reagents should not have posed a problem. Patients were deprived of the benefit of the tests due to inaction for timely procurement of reagents.

Equipment worth Rs.21.20 lakh as detailed in Table-9 below were also lying non-functional in two civil hospitals of Barpeta and Karbi Anglong districts.

Table-9

Name of Civil Hospital	Name of equipment	Date of installation	Cost (Rs. in lakh)	Date from which remaining non-functional	Action taken
Barpeta Civil Hospital, Barpeta	One X-Ray Unit	N.A	N.A	07.03.05	Nil
	One Ultrasound Machine	N.A	6.20	August/04	N.A
Diphu Civil Hospital, Karbi Anglong	One 300 MA X-Ray	23.11.01	8.80	30.05.03	Higher Authority informed
	One Ultrasound Machine	08.07.2000	6.20	15.08.03	Company was intimated on 20.08.03
Total			21.20		

Source: Stock books of the respective hospitals.

In Diphu Civil Hospital, the Ultrasound machine became non-functional after conducting only 75 tests. Except for intimating the company through a fax message, no other action was taken. Thus, the apathy and lack of appropriate action of the authority concerned was responsible for underutilisation of equipment as well as their prolonged non-functioning for want of repair/replacement.

3.2.21 *Non availability of equipment*

Joint Director of Health Services, Kamrup in Draft District Action Plan 2005-10, prepared under Reproductive and Child Health Care Programme-II, had observed that more than 99 *per cent* of the SD/SHCs and more than 98 *per cent* of the sub-centres

had no delivery table. Almost 80 *per cent* of the sub-centres had no examination table. Out of nine CHCs opened so far, four were running with minimum indoor facilities, and the remaining five were functioning as OPD only. There was lack of privacy in all the sub-centres to carry out proper antenatal, natal and post natal examinations, IUD insertion etc., due to non-availability of proper infrastructure.

In other test-checked districts either draft action plans were under preparation (Barpeta, Dibrugarh) or similar information were not available in the draft action plan prepared (Karbi Anglong, Nagaon, Cachar).

Spot verification of the records of 4 PHCs and 3 CHCs in Kamrup²² and Nagaon²³ districts disclosed that only in Kawaimari CHC X-ray, Ultrasound and generator set were functioning and that too only from April 2005. Life saving devices like oxygen cylinder was available only in Kawaimari CHC. Simple laboratory testing facilities like urine testing were available only in Rampur PHC and Kawaimari CHC. Most of the essential equipment were not available in Uparhali and Samaguri PHCs.

3.2.22 *Unserviceable equipment*

The Joint Director of Health Transport and Equipment Maintenance Organisation, Guwahati conducted (July 2001 to December 2002) a survey on the status of equipment as on 31-12-2002 in different Government health units of 23 districts and three medical colleges and MMC Hospital, Guwahati. According to the survey, the condition of the equipment in the hospitals and health centres of the State presented a very poor picture. Out of 18,743 items of existing equipment under 40 major categories (like X-Ray, Autoclave, Ultrasound, ECG machines etc.), 7,812 items (42 *per cent*) remained unserviceable for a considerable period of time. The districts with the maximum number of unserviceable equipment were Silchar Medical College Hospital (784 equipment), Nalbari (287 equipment), Kokrajhar (370 equipment) and Goalpara (202 equipment). Though the majority of the equipment was assessed as repairable at an approximate cost Rs.88.90 lakh, the Department had not taken steps for their repair/replacement, for reasons not on record.

As a result of non-repair of the equipment, the health centres failed to render requisite health care services for which these were procured.

²² Kamrup CHC: Mirza, Chaygraon

PHC: Rampur, Chaygraon, Uparhali

²³ Nagaon: CHC: Kaneaimari

PHC: Samaguri

Waste (Biomedical and others) disposal management

3.2.23 *Non-construction of sewage treatment plant*

According to Bio Medical Waste Rules 1998 framed under the Environment Protection Act 1986 which were made effective in the State from July 1998, hospitals with bed strength of 200 and above were required to create facilities for disposal of bio-medical waste by December 1999. The GMCH, AMCH and MMC hospitals having bed strength of 1,435, 1,374 and 350 respectively were required to have waste disposal facilities like incinerator, effluent treatment plant etc.

Scrutiny of records revealed that the Department and their implementing agencies did not take care of waste disposal management due to non-construction of Sewage Treatment Plant in GMCH. The work taken up in November 2000 with Government approval and sanctioned for Rs.97.66 lakh, remained incomplete, as the appointed contractor did not carry out the work after receipt of mobilisation advance of Rs.10 lakh in December 2000. The mobilisation advance was also irregularly granted violating the provision of paragraph 32.7 of CPWD Manual Volume-II which stipulated that mobilisation advance up to a maximum of 10 *per cent* of the contract value could be granted where the value of the work is more than Rupees one crore. The advance remained unrecovered (July 2005).

Subsequently, the estimate was revised with fresh administrative approval (November 2003) for Rs.1.71 crore and the work was entrusted to the Public Works Department. As of December 2004, only 15 *per cent* physical progress of work was reported. Apart from cost escalation of Rs.73.60 lakh, the unusual delay in construction had led to the hazard of environmental pollution.

3.2.24 *Delay in implementation of Central scheme for waste management*

Government of India, Ministry of Health and Family Welfare sanctioned (March 2002) Rs.1.10 crore for construction of incinerator, wheel barrow for transportation of waste and equipment like needle shredders, storage bins, high density plastic etc., for the three medical colleges (Rs.30 lakh each) and for MMC Hospital (Rs.20 lakh). The works were taken up belatedly and agreements with the contractors drawn up in April 2004 (GMCH), May 2004 (AMCH) and August 2004 (SMCH) with stipulation to complete the works within two months of issue of work orders. As of March 2005, none of these works had been completed.

Thus, the Central scheme of waste management in the major hospitals did not take off.

Vehicles

3.2.25 *Purchase of vehicles under IPP – IX*

The PD, AAP procured 211 vehicles²⁴ between 1995 and 2001 at a cost of Rs.6.76 crore and distributed them to CHCs, PHCs, Hospitals and Dispensaries including Training Centres.

²⁴ 93 Jeeps, 66 Mahindra and Mahindra, 33 Tata Sumo, 3 Ambassadors, 3 Maruti Van, 10 Nos. 407 Tata delivery van and 3 Nos. 709 Tata delivery van.

The information furnished by four Jt. DHS of six test-checked districts, revealed that under IPP-IX four Jt. DHS had received 17 vehicles against 21 vehicles shown to have been issued to them by the PD, AAP (IPP-IX) as shown in Table -10 below:

Table -10

Sl.No.	Name of Jt. DHS	Vehicles received from IPP - IX		Difference (Short receipt by Jt.DHS)
		As per IPP – IX record	As stated by Jt. DHS	
1.	Jt. DHS, Silchar	5	5	Nil
2.	Jt. DHS, Nagaon	9	6	3
3.	Jt. DHS, Karbi Anglong	3	2	1
4.	Jt. DHS, Dibrugarh	4	4	Nil
	Total	21	17	4

Source: Departmental records.

Short receipt of four vehicles under IPP-IX by the Joint DHS needs to be investigated by Government. The types of vehicle could not be ascertained from the information furnished and hence cost could not be worked out.

3.2.26 Off-road vehicles

Vehicles are essential for providing day to day health care services. Scrutiny of records disclosed that large numbers of vehicles were not functional in the three Directorates due to non-repair as shown in Table-11 below:

Table-11

Sl. No.	Directorate	Total No. of vehicles in the Department	Nos. of on road vehicles	Nos. of off-road vehicles
1.	DHS (Central)	435	363	72
2.	DHS (FW)	130	106	24
3.	DME	37	30	7
	Total	602	499	103

Source: Information furnished by the Directorates.

Thus, as of March 2005, 17 *per cent* of the departmental vehicles remained off the road, with consequential effect on smooth delivery of health care services.

In five out of six test-checked districts, out of 127 vehicles, 52 vehicles (41 *per cent*) were non functional as of March 2005 as shown in Table-12 below:

Table-12

Sl. No.	Name of district offices	Total	Nos. on road	Nos. off road
1	Cachar: Jt. DHS	15	12	3
	Addl. CM & HO	5	5	-
2	Barpeta: Addl. CM & HO	10	5	5
3	Nagaon: Jt. DHS	50	26	24
4	Karbi Anglong: Jt. DHS	28	13	15
5	Dibrugarh: Jt. DHS	14	10	4
	Addl. CM & HO	5	4	1
6.	Kamrup, Jt. DHS	Did not furnish information		
	Total	127	75	52

Source: Information furnished by the district offices.

In five selected districts (except Barpeta) 118 PHCs and 23 CHCs (out of 194 PHCs and 34 CHCs) were functioning without vehicles. Thus, in 61 *per cent* of the PHCs and 68 *per cent* of the CHCs in the five selected districts there were no transportation facilities to carry high risk and other emergency patients to Government hospitals/health care units.

Absence of requisite number of serviceable vehicles in these districts had affected speedy achieving of health care service to the patients.

3.2.27 Conclusion

The number of health care centres in the State i.e., CHCs, PHCs and Sub-centres were not adequate. In a number of existing health care units, facilities such as drinking water, electricity supply and functional toilet were deficient. Slow and tardy pace of construction had resulted in a number of buildings remaining incomplete for considerable periods of time, thus adversely affecting delivery of health care services. Added to the above, is the large stock of unserviceable medical equipment due to non-replacement, non-repair, non-maintenance etc., and highly unsatisfactory rate of utilisation of the functioning equipment. These shortcomings had severely compromised efficient and effective working of the health care system in the State.

Recommendations

- A detailed action plan should be chalked out for repair/renovation/completion of existing building infrastructure and provision of basic facilities therein.
- The Chief Engineer, Public Works Department should be asked to submit an action plan for completing on-going construction of all incomplete buildings.
- Optimum utilisation and accountal of functional equipment/instruments is to be ensured through effective monitoring and reporting.
- Immediate action should be taken on the survey report submitted by the Joint Director of Health Transport and Equipment Maintenance Organisation, for repair/replacement of unserviceable equipment and instruments.
- Investigation should be carried out to find out the status of vehicles provided to different health care institutes/units. Based on the investigation report Government may draw up an action plan for providing transport facilities to the rural health care institutes/units.

The matter was reported to Government in June 2005; their replies had not been received (August 2005).

Appendix – XX

Statement showing the position of budget provision and funds released in respect of building component of health schemes.
(Ref: Paragraph-3.2.7; Page-46)

(Rupees in crore)

Sl. No.	Head of A/c	2000-01		2001-02		2002-03		2003-04		2004-05		Total		Percentage of budget provision to fund release
		Bud. Prov.	Final release	Bud. Prov.	Final release	Bud. Prov.	Final release	Bud. Prov.	Final release	Bud. Prov.	Final release	Bud. Prov.	Final release	
1	4552 CO on NEC (Plan)	12.33	5.08	18.33	5.74	14.86	6.67	11.16	7.16	29.86	3.49	86.54	28.14	33
2	4210-CO on Medical & PH	0.60	0.60	21.96	12.90	19.24	4.82	30.17	18.51	25.25	9.20	97.22	46.03	47
	Total											183.76	74.17	40

Appendix-XXI
Incomplete Works prior to 2000-01 (1967-68 to 1999-2000)
(Ref: Paragraph-3.2.9; Page-48)

Sl. No.	Name of Divn. (PWD Bldg)	PHCs			CHCs			200 bed Hospital			100 bed Hospital			State Dispensaries			Sub-Centres			Total		
		No. of works	Estimated amount	Exptr.	No. of works	Estimated amount	Exptr.	No. of works	Estimated amount	Exptr.	No. of works	Estimated amount	Exptr.	No. of works	Estimated amount	Exptr.	No. of works	Estimated amount	Exptr.	No. of works	Estimated amount	Exptr.
1	Tezpur	8	120.02	26.36	5	192.43	42.45	1	201.11	50.61	1	17.35	3.78	-	-	-	-	-	-	15	530.91	123.20
2	Nalbari	13	188.29	83.29	4	191.66	100.17	-	-	-	1	250.34	219.86	-	-	-	-	-	-	18	630.29	403.32
3	Silchar	2	6.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	6.50	-
4	Barpeta	2	28.38	13.27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	28.38	13.27
5	Dhubri	5	101.06	57.80	-	-	-	-	-	-	2	516.63	33.33	2	13.48	-	3	3.78	1.77	12	634.95	92.90
6	Goalpara	2	39.60	6.54	2	260.59	275.59	-	-	-	-	-	-	-	-	-	-	-	-	4	300.19	282.13
7	Karimganj	17	236.55	97.89	6	350.56	106.92	1	151.06	12.32	-	-	-	1	4.76	3.91	2	2.56	1.26	27	745.49	222.30
8	Dibrugarh	-	-	-	1	30.22	24.96	-	-	-	-	-	-	-	-	-	-	-	-	1	30.22	24.96
9	North Lakhimpur	3	35.37	-	5	213.98	137.46	1	187.50	96.73	1	23.97	23.97	-	-	-	-	-	-	10	460.82	258.16
10	Kamrup	-	-	-	-	-	-	-	-	-	1	166.67	-	-	-	-	-	-	-	1	166.67	-
11	Tinsukia	-	-	-	1	92.52	10.06	-	-	-	1	34.95	34.95	-	-	-	-	-	-	2	127.47	45.01
12	Kikrajhar	2	75.39	22.00	1	35.80	35.80	-	-	-	-	-	-	1	5.72	5.72	9	10.01	9.46	13	126.92	72.98
13	Jorhat	3	7.00	1.17	-	-	-	-	-	-	1	257.43	219.65	-	-	-	1	2.44	1.00	5	266.87	221.82
14	Sibsagar	-	-	-	-	-	-	1	429.29	341.84	2	503.86	235.49	-	-	-	-	-	-	3	933.15	577.33
15	Mangaldoi	5	151.01	95.23	-	-	-	1	131.28	56.63	1	220.50	193.60	-	-	-	-	-	-	7	502.79	345.46
Total		62	989.17	403.55	25	1367.76	733.41	5	1100.24	558.13	11	1991.70	964.63	4	23.96	9.63	15	18.79	13.49	122	5491.62	2682.84

Incomplete Works taken up during 2000-01 to 2003-04

Sl. No.	Name of Divn. (PWD Bldg)	PHCs			CHCs			200 bed Hospital			100 bed Hospital			State Dispensaries			Sub-Centres			Total		
		No. of works	Estimated amount	Exptr.	No. of works	Estimated amount	Exptr.	No. of works	Estimated amount	Exptr.	No. of works	Estimated amount	Exptr.	No. of works	Estimated amount	Exptr.	No. of works	Estimated amount	Exptr.	No. of works	Estimated amount	Exptr.
1	Tezpur	16	109.73	22.47	2	29.91	Nil	-	-	-	-	-	-	1	4.95	Nil	-	-	-	19	144.59	22.47
2	Nalbari	3	17.68	Nil	1	10.00	6.00	-	-	-	-	-	-	2	10.61	10.61	-	-	-	6	38.29	16.61
3	Silchar	2	8.38	Nil	1	11.29	2.29	-	-	-	-	-	-	1	1.00	Nil	1	3.89	Nil	5	24.56	2.29
4	Barpeta	3	45.06	10.54	2	196.59	102.91	-	-	-	-	-	-	-	-	-	-	-	-	5	241.65	113.45
5	Dhubri	5	61.67	11.20	1	41.65	15.00	-	-	-	-	-	-	3	20.20	Nil	-	-	-	9	123.52	26.20
6	Goalpara	13	120.19	21.08	2	43.20	Nil	-	-	-	-	-	-	12	71.99	Nil	-	-	-	27	235.38	21.08
7	Karimganj	6	39.11	12.67	3	126.71	98.48	-	-	-	-	-	-	-	-	-	-	-	-	9	165.82	111.15
8	Dibrugarh	1	2.73	Nil	4	48.46	10.22	-	-	-	-	-	-	1	7.26	Nil	-	-	-	6	58.45	10.22
9	North Lakhimpur	1	10.81	Nil	1	10.00	5.00	-	-	-	-	-	-	3	30.33	11.60	-	-	-	5	51.14	16.60
10	Kamrup	-	-	-	2	105.97	62.34	-	-	-	-	-	-	2	6.00	Nil	-	-	-	4	111.97	62.34
11	Kikrajhar	3	80.13	9.60	1	3.73	Nil	-	-	-	-	-	-	5	90.80	16.68	1	4.12	4.11	10	178.78	30.39
12	Jorhat	38	264.29	48.16	10	64.72	29.27	-	-	-	-	-	-	7	43.70	2.80	-	-	-	55	372.71	80.23
13	Sibsagar	5	81.86	41.34	6	139.55	68.43	-	-	-	-	-	-	1	15.00	10.00	-	-	-	12	236.41	119.77
14	Nagaon	7	87.13	24.25	5	110.27	20.49	-	-	-	-	-	-	7	52.98	6.28	1	3.09	Nil	20	253.47	51.02
Total		103	928.77	201.31	41	942.05	420.43	-	-	-	-	-	-	-	354.82	57.97	3	11.10	4.11	192	2236.74	683.82
Grand Total		165	1917.94	604.86	66	2309.81	1153.84	5	1100.24	558.13	11	1991.70	964.63	49	378.78	67.60	18	29.89	17.60	314	7728.36	3366.66

Source: Quarterly progress reports submitted by the Executive Engineers to CE.

Appendix – XXII

Statement showing funds released by NEC/State Government and utilised by the implementing agencies

under Revenue head (equipment, drugs etc.)

(Ref: Paragraph-3.2.17; Page-52)

(Rupees in lakh)										
Sl. No.	Name of the scheme	Fund released by NEC to State Government			Fund released by state Govt.			Fund utilised by implementing agency		
		8 th plan	9 th plan	10 th plan	8 th plan	9 th plan	10 th plan	8 th plan	9 th plan	10 th plan
1	2	3	4	5	6	7	8	9	10	11
1	Support to GMC, Ghy	68.38	68.12	--	68.38	68.12	--	68.38	56.12	--
2	Regional Nursing Home, Ghy	--	63.21	--	--	17.96	--	--	10.78	--
3	Regional Dental College, Ghy	50.00	154.28	--	34.00	154.28	--	34.00	149.69	--
4	Support to Dev. Of Addl. Facilities for specialization & super specialisation in Medical college	--	226.28	454.70	--	226.28	415.33	Nil	224.20	415.33
5	Estt. of regional Instt. of TB & Respiratory disease attached to AMC	--	110.00	--	--	16.67	--	--	15.10	--
6	Estt. of Instt. of communicable disease attached at AMC	--	112.00	--	--	40.90	--	--	21.21	--
7	Scheme to support Med. Colleges (Paying cabins)	--	37.89	--	--	4.13	--	--	1.64	--
8	Infrastructure support to Dr. JKS Homeo College, Jhalukbari	--	65.74	--	--	22.18	--	--	20.56	--
9	Development of infrastructure of Govt. Ayurvedic College, Ghy	--	92.40	--	--	48.70	--	--	34.12	--
	Total	118.38	930.90	454.70	102.38	599.22	415.33	102.38	533.42	415.33
	Sectoral total	1049.28			701.60			635.80		
	Short release/short utilised				347.68			65.80		