

CHAPTER III

PERFORMANCE REVIEWS

IRRIGATION AND FLOOD CONTROL DEPARTMENT

3.1 Thoubal Multipurpose Project

Thoubal Multipurpose Project was taken up in 1980 for creating additional irrigation potential, augmenting drinking water supply and generating hydel power. The State Government, however, failed to complete the project even after 17 years of the original schedule date of completion (1987). Due to non-completion of the project, general public in Imphal and surrounding areas continue to face scarcity of safe drinking water, farmers of Thoubal and other districts suffer from lack of irrigation facilities and people in backward tribal villages of Ukhrul and Senapati districts continue to wait for their villages to be electrified. Reasons for delay and irregularities noticed in execution of the project are highlighted below.

Highlights

The project, which was initially planned to be completed in seven years (by 1987), has fallen behind schedule by 20 years resulting in the cost of the project escalating from original Rs.47.25 crore to Rs.390 crore. Expenditure of Rs.229.02 crore has already been incurred up to 2003-04.

(Paragraph 3.1.13)

The rescheduled date of completion (2007) also seems unachievable due to slow progress of work on the project. Only 16 *per cent* of the dam, 29 *per cent* of the spillway and 60 *per cent* of the distribution system has been completed in the last 24 years.

(Paragraph 3.1.6)

Reasons for delay and slow pace of work are inadequate funding by the State Government, delayed release of Central assistance, non-settlement of disputes relating to land acquisition cases and frequent stoppages in work due to poor security arrangements at the project site. The delay in completion has caused potential revenue loss of Rs.31.89 crore to the State Government.

(Paragraphs 3.1.9 to 3.1.13)

Against the total budget provision of Rs.99.82 crore, actual expenditure on the project was only Rs.68.15 crore during the last five years due to issue of less cheque drawal authority to the project divisions by the Government. Central assistance of Rs.21.80 crore obtained for the project during the last three financial years was also diverted and not released to the implementing agency by the State Government.

(Paragraphs 3.1.4, 3.1.5 & 3.1.10)

State Government did not adhere to the terms of sale agreement for acquisition of land to be submerged on completion of the dam and delayed payment of Rs.12.23 crore to the land owners by more than five years thereby incurring an inevitable interest liability of Rs.6.10 crore on these payments.

(Paragraph 3.1.11)

Delay in completion of the project resulted in demand of huge compensation of Rs.36.11 crore by contractors of dam and spillway on account of idling their men and machinery due to frequent and intermittent stoppages of work.

(Paragraph 3.1.15)

Failure to synchronise work on power component with the actual progress of work on the dam led to premature procurement of material and generating sets worth Rs. 2.26 crore for power component. This resulted in blocking of capital of Rs.2.26 crore for more than seven years as the equipment could not be utilised due to non-completion of the dam.

(Paragraph 3.1.17)

Large number of muster rolls were employed without any departmental works, thus incurring an irregular expenditure of Rs.1.58 crore on their remuneration.

(Paragraph 3.1.24)

Introduction

3.1.1 The Thoubal Multipurpose Project, conceived in 1980 at an estimated cost of Rs.47.25 crore, aimed at creating of annual irrigation potential of 33,400 hectares over a cultivable command area of 21,862 hectares, augmenting drinking water supply to Imphal city and surrounding areas by 45.46 MLD¹ and generation of 7.50 MW² of hydel power for rural electrification. The project envisaged construction of an earthen dam across Thoubal river at Phayang/Maphou village, 38 km from Imphal city and an RCC barrage at Keithelmanbi, 17 kms downstream of the dam site, with left and right canal systems taking off from the barrage having a total length of 57.115 km. of main canal and 46.92 km of branch canals.

The actual work started in August 1980 and the project was scheduled to be completed in August 1987. But due to slow progress and other reasons, the completion of the project got re-scheduled to October 1994 and then again to March 2007. The cost of the project was also revised to Rs.254 crore in 1997 at 1994 price level and re-estimated to Rs.390 crore at 1997 price level.

¹ Million litres a day

² Megawatt

Organisational set up

3.1.2 The Chief Engineer, Irrigation and Flood Control Department (IFCD), Government of Manipur, is the overall in-charge of the project, in the implementation of which he is assisted by an Additional Chief Engineer, three Superintending Engineers and five Executive Engineers in charge of four project divisions and a task force division.

Audit coverage and objective

3.1.3 Records of execution of the project for the period 1999-2000 to 2003-04 maintained by the Chief Engineer, Additional Chief Engineer and four working divisions³ were test-checked in the review conducted from May to July 2004 to examine the progress of work *vis-à-vis* targets, and efficiency in execution of the project.

Financial management

3.1.4 The budgetary support made available during the last five years and the expenditure thereagainst were as follows:

(Rupees in crore)

Year	Budget provision	Expenditure	Excess (+) Savings (-)	Percentage Excess (+) Savings (-)
1999-2000	23.28	17.77	(-) 5.51	(-) 23.67
2000-01	17.35	10.01	(-) 7.34	(-) 42.31
2001-02	14.36	10.33	(-) 4.03	(-) 28.06
2002-03	22.63	15.55	(-) 7.08	(-) 31.29
2003-04	22.20	14.49	(-) 7.71	(-) 34.72
Total	99.82	68.15	(-) 31.67	(-) 31.72

(Source: Departmental figures)

During all the five years reviewed by Audit, there were significant savings ranging between 23.67 per cent and 42.31 per cent of the budget provision. Out of the total budget provision of Rs.99.82 crore, only Rs.68.15 crore were spent during last five years and Rs.31.67 crore remained unspent.

3.1.5 Persistent savings were due to issue of less cheque drawal authority (CDA) by the Finance Department of the State Government to IFCD. The total budget provision of Rs.99.82 crore for the last five years consisted of Rs.80.60 crore for works and Rs.19.22 crore for salaries. Against the budget provision of Rs.80.60 crore for works, the Finance Department issued CDA for only Rs.45.86 crore against which an expenditure of Rs.49.11 crore was incurred by the project authorities. Thus, enough funds were not made available to the project authorities despite provisions being made in the successive budgets.

Because of CDA restrictions, the expenditure fell short of the prescribed requirement in three years and the State Government therefore, could not avail of

³ Thoubal Project Division I, Phayang, Thoubal Project Division II, Phayang, Thoubal Project Division IV, Yairipok and Task Force Division, Keithelmanbi.

the second instalment of Central Loan Assistance (CLA) sanctioned by the Government of India under Accelerated Irrigation Benefit Programme (AIBP) for a total amount of Rs.9.28 crore (1998-99: Rs.6.28 crore, 2001-02: Rs.2.50 crore and 2003-04: Rs.0.50 crore).

Accepting the audit observation, the Secretary, IFCD stated (October 2004) that whatever meagre budgetary provisions were made for the project over the years were never allocated in full by the State Finance Department and to make the matter worse even the CLA under Accelerated Irrigation Benefit Programme and Additional Central Assistance (ACA) sanctioned by the Government of India specifically for this project were also not made available in time and adequately.

Physical progress

Percentage completion of various component of the project

3.1.6 Though initially planned to be completed in just seven years (by 1987), the project is nowhere near completion after 24 years of commencement of work on the project. The physical progress of execution of works on various components of the project in terms of percentage completion is given in the table below:

Components of the project	Progress of work by the end of the year (percentage completion of the components)						
	1997-98	1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04
Dam	8	10	13	14	14	14	16
Spillway	12	19	24	25	25	28	29
Barrage	100	100	100	100	100	100	100
Main and Branch Canals	68	69	70	71	71	78	80
Distribution systems	50	50	50	50	50	50	60

While the barrage was completed way back in 1991, there was very slow progress on other components since 1997 when the project was rescheduled for completion by 2007. Dam and spillway are also nowhere near completion as just 16 *per cent* and 29 *per cent* of the works on these components have been completed during last 24 years. Work on distribution system remained idle for six years from 1997-98 to 2002-03 and only 10 percent progress was achieved in 2003-04. If the same sluggish rate of progress continues, the target of completing the project by 2007 also seems unachievable.

The Secretary, IFCD in his reply accepted that the progress on these components was far from satisfactory and the project might not be completed by 2007 considering the present trend of funding and disturbed law and order situation in the State.

Physical targets and achievements

3.1.7 Department failed to achieve its targets in most of the components of the project during last five years. Year-wise details of physical targets and achievements for the period from 1999-2000 to 2003-04 are given in the *Appendix- XXI*.

Achievement was very low in earth dam component. Except excavation work, shortfalls were as high as 89 per cent on coffer dam, 87 to 99 per cent on foundation treatment and 96 per cent on earth fill for the dam. In spillway work, there were shortfalls ranging from 99 to 100 per cent in four out of seven items of work. The progress under drainage and protection work was also unsatisfactory with shortfall being 86 per cent. Shortfall in land acquisition (30 per cent) on head works and canals hindered the progress of works on distribution systems.

The Department stated (October 2004) that further execution of distribution systems had been stopped as no additional land within the command area could be brought under irrigation until the reservoir was built after the completion of the dam.

Reasons for delay in the project

3.1.8 The reasons for delay in completion of the project and shortfalls in achieving the targets were inadequate funding, delayed release of Central assistance, problems relating to land acquisition cases and poor security arrangement at the project. These reasons for delay are discussed below:

Inadequate funding

3.1.9 Ensuring availability of requisite funds for the project was essential for smooth progress of work, so as to complete the project by the rescheduled date in 2007. The State Government however failed to meet the funds requirement of the project thereby affecting the pace of execution of works on important components. The position of projected requirement, actual availability of funds and actual expenditure on the project during IXth Plan and first two years of Xth Plan is given in the table below:

(Rupees in crore)

Period		Projected requirement of funds	Funds provided	Actual expenditure
IX th Plan	1997-2002	200	160	71.35
X th Plan	2002-03	30 - 40	22.63	15.55
	2003-04	30 - 40	22.20	14.55

Despite the project having been delayed considerably, the funds actually made available during IXth Plan and the first two years of the Xth Plan were much less than the projected requirement. Even the funds provided in the budget were also not made available fully due to CDA restrictions, as discussed in para 3.1.5 earlier. At this rate of funding, the project is not likely to be completed by 2007.

While accepting the observation, the Secretary, IFCD stated in October 2004 that with the trend of releasing funds twice or thrice at the most, in a year, instead of on a monthly basis, and not allowing the cheques so issued to be encashed for long periods negated the whole planning process and thereby affected the progress of work.

Delayed release of Central assistance

3.1.10 The project was included for Central Loan Assistance (CLA) under Accelerated Irrigation Benefit Programme since 1997-98 by the Government of India. The Ministry of Finance started providing Additional Central Assistance (ACA) to the project from the year 2001-02. Between 1997-98 and 2003-04, the Government of India released total assistance of Rs.83.84 crore under the two programmes (CLA Rs.58.84 crore ACA Rs.25.00 crore) to the State Government for the project. The position of release of Central assistance to the project is given in the *Appendix-XXII*.

It was noticed in audit that out of Rs.46.50 crore received by the State Government under CLA and ACA during 2001-02 to 2003-04, an amount of Rs.21.80 crore was yet to be released to the project by the State Government (July 2004).

The Secretary, IFCD accepted that Central loan as well as Central assistance provided by the Government of India were not released by the State Government in full to the project.

Non-payment of compensation in land acquisition cases

3.1.11 Of the total 1284.53 hectares of land to be submerged, the Department went ahead in March 1996 to purchase 1146.87 hectares of land extending over six villages having 404 tribal families, at a total cost of Rs.20.70 crore.

According to the terms of the sale agreement signed (March 1996), the Department was to pay the first instalment of Rs.5.91 crore at the time of signing the agreement and the balance Rs.14.79 crore within two years of the signing of agreement, failing which interest at the rate of 12 *per cent* was payable to the villagers whose land was acquired. The first instalment of Rs.5.91 crore was paid in March 1996 but the State Government failed to pay the remaining amount in time. It could pay only Rs.2.56 crore up to March 1998 leaving a balance of Rs.12.23 crore on which interest was payable to the land owners as per agreed terms.

Till September 2003, the Department had paid a total amount of Rs.16.05 crore against the purchase price of Rs.20.70 crore excluding the interest payable for delay. When final payment of the balance was offered by the State Government in September 2003, it was refused by a number of villagers who demanded payment of interest on delayed amounts. They often obstructed the construction activities due to which work had to be stopped off and on.

Failure on the part of the State Government in making full payment as per agreed terms resulted in delay of more than five years in acquisition of land and also in avoidable interest liability of Rs.6.10 crore (up to March 2004).

Further, the State Government could so far rehabilitate only two villages having population of 315 at nearby settlement sites and the fate of remaining four villages remained undecided.

The Secretary, IFCD in his reply (October 2004) accepted the delay in releasing the last instalment of compensation and stated that the matter regarding admissibility of interest payment to the land owners was under consideration of a Committee headed by the Additional Chief Secretary, Government of Manipur and their report was still awaited. He further stated that rehabilitation of remaining four villages would be completed before filling up of the reservoir.

Security related problems

3.1.12 The project is located at the tri-junction of three revenue districts - Imphal, Senapati and Ukhrul. Disturbed law and order situation prevailing in the State had adverse effect on the smooth progress and timely completion of the project. The Government had declared the project site as protected area in October 1982 but no security post was set up till September 1990, although the Department had been persuading the Government for (a) stationing security post of adequate strength on either side of the river with well coordinated security arrangements covering the entire project area, (b) providing static surveillance at strategic points and (c) opening of one police post at the site. As a result, there have been 31 violent incidents between May 1990 to March 2004 in which armed miscreants, extremists, anti-social elements *etc.*, either damaged/destroyed the project buildings/equipment, made extortion demands or attacked, intimidated, abducted or killed project officials, workmen and contractors. The construction activities on the project halted intermittently due to such violent incidents.

Violent incidents at the project site between May 1990 and June 1992 ultimately led to suspension of work for about five years. The security arrangements at the project site were considered inadequate and on three occasions the Department proposed (January 1998, May 1998 and June 1999) closure of works and shifting of machinery to a safer area till such time as congenial atmosphere was restored at the site.

Had there been adequate security arrangements at the site, delay in execution of work could have been minimised.

The Secretary, IFCD informed that security arrangements at the project were reviewed by the Government and a subsidiary security post has been opened very recently as a first step towards strengthening security for the project.

Impact of delay

Time and cost overrun

3.1.13 The original scheduled date of completion of August 1987 had been successively pushed down to October 1994, March 2002 and finally to March 2007. Failure on the part of the State Government to ensure timely completion of

the project resulted in escalation in the project cost. The original cost of Rs.47.25 crore was revised to Rs.254 crore in 1997 at 1994 price level and was approved by the Ministry of Water Resources in October 1997. As the project could not be completed by 1997, the cost was again re-estimated to Rs.390 crore (at 1997 prices) for completion by 2007. The progressive expenditure on the project stood at Rs.229.02 crore by the end of March 2004.

Given the present pace of work, the project is not likely to be completed by 2007 which may result in escalation of costs. Even the Chief Engineer, IFCD apprehended that the project would be further delayed and could only be completed earliest by the year 2010 considering the present trend of funding and obstacle/hindrances in construction of the dam and the spillway.

Potential Revenue loss

3.1.14 Due to extreme delays and successive rescheduling, the objectives of the project *viz.*, creating irrigation potential of 33,400 hectares of land, supplying clean and safe drinking water to Imphal city and electrifying far flung villages of two hill districts of the State, remained unfulfilled even after 17 years of the original schedule date of completion. The project appraisal report of the Central Water Commission prepared in September 1997 had estimated net revenue generation of Rs.42.80 lakh per year from irrigation and Rs.23.73 lakh per year from sale of raw water to Public Health Engineering Department for supply to Imphal after proper treatment.

The delay in completion of the project has therefore, caused a potential revenue loss to the Government of Rs.7.28 crore (irrigation) and Rs.4.03 crore (water supply) for the period 1988 to 2004 apart from the notional revenue loss of Rs.20.58 crore⁴ for the period 1995 to 2004 on account of electricity that could have been generated had the project been completed on schedule. Further, the net value of annual produce after canal irrigation in the area was expected to go up from Rs.3.10 crore to Rs.51.84 crore on completion of the project. Non-completion of the project in time deprived the farmers the benefit of increased agricultural production.

The Secretary, IFCD stated in his reply (October 2004) that the progress of the project was reviewed recently by the Chief Secretary, Government of Manipur, and assured that due attention would be given to speedy implementation of the project in the current and subsequent Plans.

⁴ Power generation possible during one year (at mean generation)=365 days x 24 hours x 1450 KW=127, 02, 000 KWH.

Cost of power as billed by Electricity Department = Rs.221,87,732/19002 KWH=Rs.1.62/KWH

Revenue per year=127,02,000 KWH x Rs.1.62=Rs.205.77 lakh

Revenue for 10 years (1995-2004) = Rs.205.77 lakh x 10 years = Rs.20.58 crore.

Execution of works

Dam and spillways

Idle charges/loss claims

3.1.15 Construction work on spillway remained suspended from June 2000 to July 2002 and on dam from June 2000 to October 2002 due to obstruction of work by the villagers who were not paid land acquisition dues as per agreed terms. The contractor for spillway, therefore, submitted a loss claim of Rs.6.52 crore for forced suspension of work during the above period. Thus failure on the part of the Department to settle land acquisition cases timely not only invited demands for interest payments from land owners but also heavy loss claims from the contractors which could have been avoided.

Government is also examining other idle charges/loss claims of Rs.29.59 crore submitted by the contractors for the period from September 1990 to January 1997 during which work had remained suspended, and a Committee constituted by the Government has recommended payment of Rs.7.15 crore to the contractors against their claims of Rs.29.59 crore

The Secretary, IFCD in his reply (October 2004) stated that a decision on the recommendations of the Committee was yet to be taken by the Government.

Non-realisation of electrical energy charges from contractors

3.1.16 Department had employed two private contractors *viz.* Progressive Constructions Limited (PCL), Hyderabad and Ansal Properties and Industries Limited (APIL), New Delhi for construction of dam and spillway components of the project. The project authorities contracted demand for supply of 600 KW energy during March 1991 to October 1997 and 200 KW during November 1997 to January 2004 to be shared by the contractors and the project authorities. The conditions of contracts provided for recovery of cost of energy from the two contractors.

It was noticed in audit that during the 155 months period from March 1991 to January 2004, the State Power Department issued bills for Rs.2.22 crore to the project authorities against which a payment of Rs.1.36 crore was made by the Thoubal Project Division No.I. The project authorities did not recover the cost of energy consumed by the two contractors for the entire period from March 1991 to January 2004 except for a meagre amount of Rs.50,000 only (PCL: Rs.40,000 and APIL: Rs.10,000). The project authorities therefore, showed undue favour to the contractors ignoring explicit conditions of the contract.

The Department stated (October 2004) that total amount payable as per bills received from the Power Department was assessed to be Rs.1.17 crore (excluding surcharges) of which only Rs.11.15 lakh was payable by the two contractors (PCL: Rs.5.51 lakh and APIL: Rs.5.64 lakh) after taking into account different periods of suspension of work which were not attributable to them. The reply of the Department is not acceptable as PCL consumed 2090.70 KWM of energy and

APIL consumed 2229.20 KWM during the 1991-2004 period based on their connected load and therefore, the amount recoverable from them would work out to be Rs.24.01 lakh and Rs.25.86 lakh respectively after excluding 2,935 days for PCL and 2,819 days for APIL during which the work had remain suspended. Details of energy consumed by the contractors and the Department are indicated in *Appendix-XXIII*. The Department did not take any action even to recover the amount of Rs.10.65 lakh assessed by them as recoverable from the contractors.

Further, during long spells of suspension of work, the Department ought to have taken action to reduce its contracted demand or disconnect the power supply temporarily if the work was completely halted. Failure of the Department to take action in this regard resulted in avoidable expenditure of Rs.69.74 lakh – the cost of energy paid by the department for the suspension period.

Power component

Blocking of capital

3.1.17 It was noticed in audit that equipment/stores worth Rs.2.90 crore procured for the power component of the project remained unused for last nine years. Detailed scrutiny disclosed the following:

The work of design, manufacture, testing, erection and commissioning of three power generating units, each of 2.50 MW capacities with accessories was awarded to a firm at Rs.5.52 crore in June 1992 for completion by July 1994. The firm supplied power equipment worth Rs.2.90 crore up to November 1995 and was paid Rs.2.26 crore up to April 1997. No further supplies were insisted upon. The Department received the supplies at Keithelmanbi, instead of the stipulated delivery site at Phayang.

The progress of work on dam and spillway was slow and it was clearly discernible that the dam and the spillway would not be completed by the stipulated date in 1994 and therefore, the work order of June 1992 for power component was ill-timed and premature. The power component of the project cannot be used without completion of the dam. In July 2001, the shed where the power equipment was kept was burnt down by militants causing damage to the power generation set. The extent of damage was not assessed. Lack of foresight and improper planning resulted in premature procurement of power equipment and blocking of capital of Rs.2.26 crore for the last nine years. Further, the power equipment suffering damage, deterioration due to prolonged storage and becoming obsolete by the time it is actually put to use on completion of the dam sometime after 2007 cannot be ruled out.

Material and machinery management

3.1.18 Material and machinery management of the project was highly deficient as discussed briefly in the succeeding paragraphs.

Unnecessary booking of expenditure at the end of the financial year

3.1.19 Two project divisions (Thoubal Project Division No.I and II) paid Rs.1.17 crore to the Stores Division in March 1990, 1995, 1997 and 2000 for supply of construction material. Against this, the Stores Division was yet to supply material of the value of Rs.37.30 lakh as of March 2004. The expenditure was booked by the project divisions towards the end of the financial year apparently to utilise cheque drawal authority issued by the Finance Department, without any immediate requirement of material.

Unserviceable machinery awaiting disposal

3.1.20 Thirty-one machines and vehicles (six bulldozers, three poclains, four track shovels, one excavator, five trucks and 12 others such as cranes, siesmopactors, stone crusher *etc.*) of the project, out of a total of 47, were in breakdown condition for periods ranging from one to 13 years. The machinery in breakdown condition were awaiting disposal till July 2004.

Department failed to take timely action for early disposal of the old machinery which are beyond economic repair. Accepting the audit observation, the Department stated that action was being taken to dispose off the machines which were beyond economic repair and efforts were also being made to repair others, subject to availability of funds.

Hire charges not recovered from private contractor

3.1.21 In May 2000, Thoubal Project Division VI, IFCD hired out one Road Roller of the project to a private contractor of the Public Works Department (PWD) at the rate of Rs.1,384 per day. The contractor returned the machinery only in January 2004 after nearly four years but no recovery of hire charges was made by the Division from him. This gave an undue benefit of Rs.18.38⁵ lakh to the contractor.

The IFC Department stated (October 2004) that the machine was issued to the contractor of PWD on 12 May 2000 and returned back on 2 January 2004 but the contractor actually used the machine only for 22 days as per the work order issued by PWD and hire charges for the same have since been recovered from the contractor. The reply of the Department is not acceptable as the machine was hired on per day basis by the private contractor and he was required to pay hire charges for the entire period (May 2000 to January 2004) for which the machine was taken from the IFCD and not just for 20 days for which work was awarded to him by PWD. If the machine was not required by the contractor, he could have been returned it to the Department to avoid payment of unnecessary hire charges.

⁵ Hire charge of the machinery for 1328 days @ Rs.1384 per day.

Machines procured from Government advance used elsewhere by the contractor

3.1.22 The Progressive Construction Limited (PCL), executing work on the dam component, had purchased 32 Tata tippers by availing advances from the Department. In the course of a departmental physical verification conducted during April 2000, 10 tippers (cost: Rs.44.87 lakh) were not found at the site and were reported to have been taken away by PCL on the pretext of getting them repaired elsewhere. Though the company had not brought back the tippers till July 2004, no action was taken against it for this irregular action.

On being pointed out in audit, the Department decided to recover a sum of Rs.80.76 lakh (the advance plus interest thereon up to March 2004) from PCL and as a first step, an amount of Rs.33 lakh was recovered from the company from a bill paid in July 2004.

3.1.23 Another contractor *viz.* Ansal Progressive Industries Limited (APIL) working on construction of spillway was allowed by the Department to take away one CK-90 Poclain (purchased from advance provided by the Department) to Guwahati in December 2002 for fitting a hydraulic rock breaker as the facility was not available at Imphal.

Though the Poclain with the hydraulic rock breaker was made functional by March 2003, APIL brought the machinery back at the project site only in January 2004 *i.e.* nine months after completion of the repair work, and attributed the delay to non-availability of trailer, disturbances on National Highway due to blockade, bundhs *etc.* Reasons for delay stated by the contractor are not acceptable in audit as the National Highway connecting Guwahati to Imphal did not remain blocked for such a long period.

The hydraulic rock breaker was required to be fitted with the excavator to increase its excavation capacity needed for lowering the foundation level of spillway. Against the target of excavating 698 thousand cubic metre in the spillway during 1999-2004, Department could excavate only 380.47 thousand cubic metre thus falling short of the target by 45 *per cent.* Had the excavator been fitted with hydraulic rock breaker in time and used in the excavation for nine months, the quantity of excavation could have been increased and shortfall in achieving the targets minimised.

Irregular expenditure on large scale employment of muster roll labourers

3.1.24 Section 9.1 of CPWD Manual Volume II provides for use of muster rolls for getting the works done departmentally through daily rated labourers. Staff on muster roll can be employed by an Executive Engineer for a maximum period not exceeding 12 months on specific sanction of the Chief Engineer.

Four divisions of the project employed 181 labourers on muster roll as on 1 April 1999 and continued to employ them throughout in the subsequent years; and on 31 March 2004, 176 labourers were on the muster roll though no work was executed departmentally. Incurring an average expenditure of Rs.2.64 lakh per

month on these muster rolls, the Divisions spent a total expenditure of Rs.1.58 crore during last five years alone.

The Department stated (October 2004) that the existing strength of the regular staff was not sufficient and the muster rolls were used for maintenance of Plants, vehicles, the barrage gate, diesel power house, roads to dam site *etc.* and also as watch and ward staff in circle and division offices. It also stated that muster rolls had been employed for the last 20 years. Reply is not tenable as muster rolls are not meant for regular establishment work. The project authorities have violated all norms of financial propriety by employing such a large number of muster rolls for a period as long as 20 years without any departmental work.

Environmental clearance

3.1.25 Though the project was cleared by the Planning Commission in 1980, forest and environmental clearance from the Ministry of Environment and Forest was still awaited (July 2004).

The Department in their reply stated that Environmental Management Plan for the project was submitted to the Ministry of Environment & Forest in 1998 for approval. The Ministry wanted yearly action plan with physical and financial targets on catchments area treatment plan (CAT), status on forest clearance for 595 hectares of forest land and made certain suggestions, action on which was being taken by the State Government. The Department needs to expedite action for obtaining necessary environmental clearance from the Government of India.

Quality control

Laxity in quality control

3.1.26 According to contractual provisions for works relating to the dam, all items of works to be executed were subject to rigid quality control for which the contractors were required to set up laboratories at the site manned by qualified engineers.

PCL, the contractor for the dam, set up a laboratory but did not install two important apparatus (i) Relative Density Apparatus to determine density of cohesion-less soil used as filter media in the dam, and (ii) Permeability Test Apparatus. Failure on the part of the contractor to install these apparatus was reported by an inspection team of the Department in October 1999 but it was noticed in audit that the contractor had not installed these apparatus even as of August 2004.

While accepting the audit observation, the Department stated (October 2004) that necessary prescribed apparatus would be installed before further laying of the filter.

Conclusion

3.1.27 There was inordinate delay of more than 17 years in the completion of the project which was started as early as 1980. The work on the project remained

suspended for nearly five years from 1992 to 1997 due to security related problems. The progress after 1997 was slow and the work on dam and spillway was stopped for more than two years from June 2000 to October 2002 by villagers due to non-payment of land acquisition dues. Progress further suffered due to inadequate funding by the State Government as only Rs.45.86 crore were released against the budget provision of Rs.80.60 crore for execution of works during last five years.

Important components of the project like dam and spillway have been badly delayed with only 16 to 29 *per cent* progress in last 24 years. Delay led to the estimated cost of the project going up from Rs.47.25 crore to Rs.390 crore and the project being rescheduled for completion in 2007.

The general public in Imphal city continue to face scarcity of safe drinking water, farmers in Thoubal and other districts continue to suffer from lack of canal irrigation facilities and backward tribal villages of Ukhrul and Senapati districts still remain to be electrified even after 17 years of the original scheduled date of completion of the project. The delay also resulted in a notional revenue loss of Rs.31.89 crore to the State Government on account of revenue that could have been generated by the facilities created in the project. The agricultural production in the area which was expected to go up significantly has also remained low.

Recommendations

- Provision of funds made in the budget for the project should be released to the project authorities to ensure that the revised targeted completion of the project by 2007 is not delayed further for want of funds.
- The State Government should release Central assistance under AIBP and ACA to the project authorities without delay.
- Land acquisition cases may be settled at the earliest to minimise interest payment claimed by the land owners from the Government.
- Government needs to make adequate security arrangements for the project so that work progresses without further stoppages and the Government is saved from mounting escalation costs and payment of huge loss claims to contractors.
- Codal provisions and financial rules should be strictly adhered to by project authorities in dealing with the claims and matters relating to contractors. Cases of default be investigated and responsibility fixed.
- Government may examine the need for large scale employment and continuance of muster rolls on the project without any departmental work.
- Environmental clearance may be obtained without further loss of time.

MEDICAL DEPARTMENT

3.2 Impact of Government policies on quality of Medical and Health Services

Continued fiscal imbalance in the State and decreasing share of developmental expenditure seriously affected the quality of services in social sector such as medical and health services. The budget allocations for medical and health services were consistently reduced during last five years from Rs.71.97 crore in 1999-2000 to Rs.63.59 crore in 2003-04, actual expenditure was far below the budget allocations and the share of health sector in the total State Plan outlay was also between two to three *per cent* being the lowest in NE States resulting in medical and health services network in the State being rendered grossly inadequate. There was below norm concentration of health centres in hill districts, extreme shortage of core specialists in Government hospitals, non-availability of basic medical equipment and infrastructure, ill equipped blood banks despite high HIV prevalence rate in the State, non functioning of Drug Control System, ineffective enforcement of Prevention of Food Adulteration Act, non adherence to safety norms in disposal of hospital waste and non availability of ambulances and others necessary facilities in State run hospitals and health care centres. There was no expansion in the health services network in terms of opening of new hospitals or health care centres and addition of beds in referral institutes

3.2.1 Introduction

The Department of Health is responsible for providing medical and health services in the State through a network of hospitals, community health centres, primary health centres, dispensaries and drug de-addiction centres.

The concept of primary health care approach and the national health policy of 1983 form the basis of health policies and programmes implemented in the State.

To assess the impact on the social sector of continued macro imbalance and Governments incorrect priorities in allocation of expenditure, the Department of Medical and Health Services was selected by Audit to examine how the adequacy and quality of medical and health services network had been affected due to deteriorating fiscal management and lesser availability of funds to these services/sector.

3.2.2 Organisation of Health Care Delivery System

The health care delivery system is organised at three levels. The primary care level is responsible for essential basic health care and comprised of primary health sub-centres (PHSCs), primary health centres (PHCs) and community health centres (CHCs). Complex curative services with basic specialist facilities are

provided at the secondary care level in CHCs and district hospitals. Tertiary care level is meant for providing specialist and super specialist care and includes Jawaharlal Nehru Hospital, Imphal, (the State level hospital) which functions as referral hospital for all the district hospitals in the State.

The Regional Institute of Medical Sciences (RIMS), Imphal also provides specialist medical care to the people of the State but it is under North Eastern Council (NEC) and not under the control of State Health Department.

A review of the Department of Health (excluding Family Welfare) was conducted from April to June 2004 by checking records maintained in the offices of the Director of Health Services, the Superintendent of Jawaharlal Nehru Hospital, eight Programme Officers and six Chief Medical Officers of six districts⁶ for the period from 1999-2000 to 2003-04 to examine adequacy and efficiency of health care delivery system in providing prompt and quality medical care services to the people of the State.

Points noticed in audit are enumerated in the succeeding paragraphs.

3.2.3 Financial Management

Year-wise details of budget grants vis-à-vis expenditure incurred by the Department on health services during the last five years were as given below:

(Rupees in crore)

Year	Budget			Expenditure			Savings(-)/Excess(+)		
	State	Centre	Total	State	Centre	Total	State	Centre	Total
1	2	3	4	5	6	7	8	9	10
1999-2000	71.97	4.66	76.63	62.68	2.72	65.40	(-) 9.29	(-) 1.94	(-) 11.23
2000-01	71.86	6.37	78.23	53.61	4.48	58.09	(-) 18.25	(-) 1.89	(-) 20.14
2001-02	70.53	4.62	75.15	56.61	1.39	58.00	(-) 13.92	(-) 3.23	(-) 17.15
2002-03	69.62	4.55	74.17	48.24	3.56	51.80	(-) 21.38	(-) 0.99	(-) 22.37
2003-04	63.59	5.84	69.43	48.16	0.93	49.09	(-) 15.43	(-) 4.91	(-) 20.34
Total	347.57	26.04	373.61	269.30	13.08	282.38	(-) 78.27	(-) 12.96	(-) 91.23

Source : Departmental figures

Funds provided for medical and health services registered a consistent decline during the last five years. The budget provision was reduced from Rs.71.97 crore in 1999-2000 to Rs.63.59 crore in 2003-04. The actual expenditure also declined significantly. There were persistent savings in all the years during 1999-2004. Savings were as high as 30 per cent in 2002-03 and 29 per cent in 2003-04. The Department attributed these savings to short release of funds by the Finance Department. Thus even funds provided in the budget by the Legislature were not made available fully to these services.

The Deputy Secretary (Health) stated in November 2004 that Government could not release enough funds due to the serious financial crunch suffered by the State.

⁶ Imphal, Thoubal, Bishnupur, Churachandpur, Chandel and Ukhrul.

Plan Outlay on health during last three Plans has been between two to three *per cent* as against four to 13 *per cent* during earlier Plans. Figures of the State Plan Outlay for health sector for last ten five years plans are given in the *Appendix-XXIV*. The plan outlay of health in Manipur is lowest in comparison to other North Eastern States. The share of health sector in the total plan outlay of the State Government has been declining over the years indicating relatively less importance being given to health care system.

3.2.4 Health care network

Medical institutions: The health services network of the State comprised of 578 medical institutions including 13 Civil Hospitals, 16 Community Health Centres, 72 Primary Health Centres, 420 Primary Health Sub-Centres, 20 Dispensaries, 9 Drug De-addiction Centres as on 31 March 2004. One Nature Cure Clinic and 8 Homeopathic Dispensaries were also functioning in the State.

No new hospitals/health care centres were opened during last five years and therefore the health care network registered no expansion during 1999-2004. There was a shortfall of 72 PHSCs, 4 PHCs and 3 CHCs in the State against the norms fixed by the Government of India. Higher concentration of health centres in the valley and acute shortage in hill districts were noticed. The number of health centres required to be established as per norm and the number actually existing in the hill and valley districts during 2003-04 were as under:

District	Rural population (2001 census)	PHSC			PHC			CHC		
		Norm	Number required	Number in position	Norm	Number required	Number in position	Norm	Number required	Number in position
Hill	9,68,114	1 per 3000	322	222	1 per 20000	48	36	1 per 80000	12	6
Valley	8,50,110	1 per 5000	170	198	1 per 30000	28	36	1 per 120000	7	10
Total	18,18,224		492	420		76	72		19	16

3.2.5 In-patient care services -Availability of beds

Norm for bed-population ratio was one bed per thousand population. The Department could achieve this norm only after taking into account the 881 beds of RIMS hospital in addition to the 1,449 beds in the hospitals run by the State Health Department.

There was however, acute shortage of beds and utility space in the JN Hospital which was the only apex referral centre of the State. The hospital, having only 200 beds, had either to deny admission to many patients or to admit many emergency cases on the floor due to non-availability of enough beds. The 100 bedded TB Hospital at Chingmeirong was also ill-equipped in regard to beds and space in view of increased incidence of TB cases due to HIV infection and also general increase in the number of TB patients in the State.

3.2.6 Blood Banks

AIDS (Acquired Immune Deficiency Syndrome) has emerged as a serious health emergency in the State. Manipur ranks third highest as regards to the total number of HIV positive cases in the country. The sero-positive rate (185 per thousand samples screened) of Manipur is the highest in the entire country. Such high HIV prevalence rate and surge in drug addiction cases in the State calls for immediate setting up of adequate number of blood banks with proper equipment and facilities to prevent further spread of HIV infection. But the arrangements presently available were inadequate. Under the National Aids Control Programme, at least one modernised blood bank was to be established in each of nine districts by 2002. At present (2003-04), only three blood banks were existing in the State, one at Regional Institute of Medical Sciences, one at JN Hospital and the other at District Hospital, Churachandpur. The Government failed to establish blood banks in the remaining district hospitals as of October 2004. Against the target of establishing six blood banks in the six district hospitals by March 2002, construction of buildings for only three blood bank (cost: Rs.30 lakh) at Ukhrul, Chandel and Tamenglong was completed as of June 2003 but the blood banks were yet to be established at these places.

Six laboratory technicians appointed in August 2002 for the blood banks in six district hospitals remained idle for 27 months due to non-functioning of the blood banks resulting in infructuous salary expenditure of Rs.8.10 lakh up to October 2004.

None of the blood banks in the State had blood component separation facilities except the Regional Institute of Medical Sciences. The blood bank at Churachandpur district hospital did not have ELISA reader for detection of HIV infection in blood samples. VDRL Shaker equipment was not functioning in this hospital since October 2001. Thus State hospitals were found ill-equipped to combat deadly HIV infection and AIDS.

3.2.7 Acute shortage of Core Specialists

Sanctioned strength and men-in-position of various grades of Manipur Health Services and paramedical staff as on July 2003 is given in the *Appendix-XXV*. State hospitals had acute shortage of Consultants and Sr. Specialists who are required in specialized departments for providing advanced medical treatment. Against the requirement of 260, only 112 Core Specialists were available. Shortage of 36 to 93 *per cent* of Core Specialists (details shown in *Appendix-XXVI*) seriously affected the quality of medical treatment in the State run hospitals. The most affected departments were Radiology, Psychiatry, Anaesthesiology, Dermatology, General Medicine and Ophthalmology.

Due to non-availability of adequate number of Senior Specialists and proper equipment and infrastructure, 5159 Government employees and their dependents had to be referred to various other hospitals outside the State between March 1999 and September 2004. This unnecessarily put extra burden on the State Exchequer on account of reimbursement of their medical and travel expenses.

3.2.8. Inadequacy of equipment and infrastructure

Availability of medical equipment, proper building and other infrastructure in the hospitals is essential for providing prompt and quality medical care services to the people. But the hospitals and health centres run by the State lacked not only in sophisticated but also in ordinary medical equipment and facilities which are essential for running such health centres and referral hospitals, as discussed below:

- **Primary care level**

In the primary care level, eight out of 16 community health centres did not have X-ray facilities. Remaining eight CHCs were provided with one machine each; but four machines were out of order for the last four to 18 years. Eight CHCs did not have proper Operation Theatre (OT) equipment. Availability of equipment in PHCs and PHSCs was also inadequate.

- **Secondary care level (District hospitals)**

District hospitals function as referral centres for CHCs and are expected to be adequately equipped with necessary medical equipment for the OT and other specialized services including maintenance of blood bank and drug de-addiction centres. But the district hospitals in the State failed to function as referral centres in the true sense. Six out of seven district hospitals had no facilities to carry out regular surgeries due to lack of OT equipment, blood bank, laboratory support and anaesthesia facility.

- **Tertiary care level**

JN Hospital, which is the only referral hospital at the State level, was in a bad state due to large number of important medical equipment remaining non-functional for want of repairs and replacements. These included OT equipment, X-ray machine, CT Scan, USG, EEG, Haemodialyser, Autoanalyser, Anaesthesia and Horizontal Sterilizer for the CSSD. The departmental authorities accepted that medical services in maternity and gynaecology, and neurosurgery departments were seriously affected due to non-functioning of USG, CT Scan and X-ray machines.

The only CT Scan machine available in the State Health Department (installed in August 1996 at JN Hospital at a cost of Rs.1.35 crore) was not functioning properly since October 2000 and remained out of service for 1,229 days out of 1,369 days from October 2000 to June 2004. The machine totally went out of order and remained unproductive since February 2004.

The Department stated (November 2004) that enough funds were not released by the Government for maintenance of hospitals, as a result, even essential items like medicine, diet, dressing materials etc. could not be supplied adequately to the patients.

3.2.9. Infrastructure

- **Buildings**

Buildings and space in hospitals/health centres at primary and secondary care level were inadequate. The covered plinth area requirement of the health centres were 1,200 sft. for PHSC, 4,000 sft. for PHC and 20,000 to 25,000 sft. for CHC. But 40 PHCs were functioning in PHSC buildings, seven CHCs in PHC buildings and one CHC in PHSC buildings. Further, 190 PHSCs (out of 420) and 38 PHCs (out of 72) had no proper Government buildings, and nine CHCs (out of 16) did not have full-fledged buildings.

- **Ambulance services**

Size of ambulance service network and its response time were important factors in determining efficiency of medical services of any health care system.

According to norm all PHCs were required to have one ambulance each; but none of the 72 PHCs in the State was having any ambulance at all since 1960. CHCs were also functioning without proper ambulance facilities.

It was also seen that large number of ambulances in the State and district level hospitals were not in working condition. Out of the total 42 ambulances in the State, only 24 were in working condition. Remaining 18 were stated to be off road seriously hampering the capability of the hospitals to quickly pick up and transport patients in serious condition for immediate medical attention.

3.2.10. Laboratory Services

Laboratory service in the State hospital was also far from being satisfactory due to inadequate supply of laboratory reagents, X-ray films, antiseptic spirit, disinfectants etc. The biochemistry section was completely non-functional. In CHCs only the routine examination of blood, stool and urine were available with no facilities for biochemistry services in any of the centres.

3.2.11. Disposal of hospital waste

Hospital wastes such as used syringes, needles, bandage cloth, expired drugs and chemicals, empty containers, bottles etc. are serious health hazards if their safe disposal is not strictly ensured by the hospital authorities. It was noticed in audit that none of the Government hospitals had incinerators for proper destruction of solid waste and sewerage treatment plants for disposal of liquid waste thus posing health hazard to the general public and the environment.

3.2.12 Drug Control System

The Drug Control System in the State was almost non-existent from 1999-2000 to 2003-2004 and the quality of drugs available in the State could not be tested. The Government failed in its responsibility to provide reasonable assurance about the quality of drugs sold to the general public. There was no drug testing laboratory in the State and drug samples were sent outside the State for testing. The Department

stated that after the retirement of the designated analyst of the State, no drug analyst was appointed by the Government for four years (September 2000 to September 2004). Only in October 2004, the Government designated the Director, Regional Drug Testing Laboratory, Guwahati as the new Government analyst for the State.

3.2.13 Prevention of Food Adulteration

To ensure availability of wholesome and quality food to the people, it is essential that the State Government strictly implements Prevention of Food Adulteration Act, 1954 by framing necessary rules and have an effective enforcement mechanism. It was noticed that though rules for prevention of food adulteration were framed in 1958, the necessary infrastructure and enforcement mechanism were not fully provided for effective implementation of the Act.

The number of food inspectors required in the State was 30 as per the existing norm (one inspector for 80,000 population). The State's population was 23.88 lakh during 2003-04. Against this, only four food inspectors were in position as of November 2004. Even against the sanctioned posts of 12 district food inspectors, there were only three inspectors working.

The Additional Director (PH/Food) stated that the incidence of adulteration in food samples increased from 12 *per cent* in 1999 to 31 *per cent* in 2003. The Department established two Food Testing Laboratories at Imphal and Moreh, but these were not well equipped. The post of Public Analyst created in 2000-01 remained unfilled till November 2004. In the absence of a Public Analyst no legal action could be initiated against cases of food adulteration. Although the incidence of adulteration increased manifold during the last five years, the Government failed to strengthen the enforcement machinery and to take action against the offenders.

3.2.14 Conclusion

Health Services network in the State was inadequate and inefficient due to the shortage of health centres in hill districts, extreme shortage of core specialists, non-availability of basic medical equipment and infrastructure, ill equipped blood banks, non functioning of Drug Control System, ineffective enforcement of the Prevention of Food Adulteration Act, non adherence to safety norms in disposal of hospital waste and non availability of ambulances and others necessary facilities in State run hospitals and health care centres. There was no expansion in the health services network in terms of opening of new hospitals or health care centres and addition of more beds in referral institutes. Thus, State Government failed in its objective of providing prompt, efficient and quality medical and health care services to the people of the State. Unless the problem of fiscal imbalances is addressed and priorities in allocation of expenditure corrected, important services in the social sector will continue to deteriorate affecting the quality of life of people in the State.

Recommendations

- Adequate number of health centres need to be established both in the hill and valley districts of the State as per Government of India norm.
- Requisite funds need to be provided for equipping State hospitals and health centres with at least basic equipment and infrastructure for their efficient running.
- Steps may be taken to minimise shortage of Core Specialists in the various disciplines.
- Fully equipped modernised blood banks capable of effectively detecting HIV infection in blood samples need to be established in each district.
- Prescribed safety norms should be strictly adhered to in disposal of hospital waste.
- Enforcement machinery for prevention of food adulteration needs to be strengthened.