# CHAPTER I: PERFORMANCE REVIEWS (CIVIL DEPARTMENTS)

# PUBLIC WORKS DEPARTMENT (WATER RESOURCES)

#### **1.1 Implementation of Irrigation Schemes**

The State has a total cultivable land of 2,80,000 ha with irrigation potential of 1,17,000 ha i.e. 41.79 per cent. The State does not have any major irrigation project and is dependant on three medium and several minor irrigation schemes. During 2004-09, the State had planned to create irrigation potential of 24,742 ha against which, it created a potential of only 10,466 ha i.e. 42 per cent. Performance review of implementation of irrigation schemes in the State revealed that the Public Works Department (Water Resources) has not prepared a long term perspective plan for Irrigation Project and in respect of the irrigation schemes taken up, Benefit Cost Ratio was not assessed. Implementation schedules were not adhered to and there were delays in acquisition of land and lack of coordination with other departments/corporations. Significant findings of audit are given below:

Out of 48 Minor Irrigation Schemes (MIS) selected for audit, DPR was not prepared in respect of 45 MIS. Against the target of 24,742 hectares, only 10,466 hectares (42 *per cent*) were created during 2004-09, the annual shortfall in creation of Irrigation Potential ranged between 36 and 74 *per cent*.

(Paragraphs 1.1.7.1 and 1.1.7.2)

Out of 48 MIS test-checked, Benefit Cost Ratio (BCR) was not assessed in 44 MIS.

(Paragraph 1.1.7.3)

The intended benefits were denied to the targeted beneficiaries as the Department did not acquire land for canals. The canal system of Khowai Medium Irrigation Project could not be completed even after its inclusion in AIBP, due to delay in land acquisition process.

(Paragraphs 1.1.7.4, 1.1.9.3 and 1.1.9.4)

During the last 10 years, only 482 MIS (44 *per cent*) out of 1,105 taken up under AIBP could be completed within the scheduled period of two years. The potential created was 22,310 ha (49 *per cent*) against the targeted potential of 45,961 ha.

#### (Paragraph 1.1.10.1)

Out of 48 sampled schemes, implementation of 25 MIS was delayed by four to 72 months due to non-enforcement of implementation schedule and lack of coordination with other departments/corporations.

(Paragraph 1.1.10.5)

## **1.1.1 Introduction**

Tripura has a total geographical area of 10,49,169 hectares out of which, the forest land constitutes 6,06,150 ha (57.77<sup>1</sup> *per cent*). The total cultivable land is 2,80,000 ha (26.69 *per cent* of total geographical area) of which, irrigation potential is 1,17,000 ha (41.79 *per cent* of total cultivable land). Gumti, Khowai, Manu, Dhalai, Howrah, Feni, Muhuri, Burima, Juri and Longai are the major rivers in the State and there are several rivulets locally called '*cherra*'.

Out of the available water resources, 79,000 ha can be brought under assured irrigation through surface water and 38,000 ha through ground water. The net irrigation potential created up to  $10^{\text{th}}$  Plan period was 90,853 ha being 77.65 *per cent* of total irrigation potential of 1,17,000 ha. Out of 90,853 ha, around 3,923 ha potential (4.31 *per cent*) was created from ground water sources through Deep Tube Wells and the rest by surface water schemes. The net utilisation was 67,914 ha, which constitutes 75 *per cent* of the potential created up to  $10^{\text{th}}$  plan. The Plan-wise creation of irrigation potential is given in the chart below:

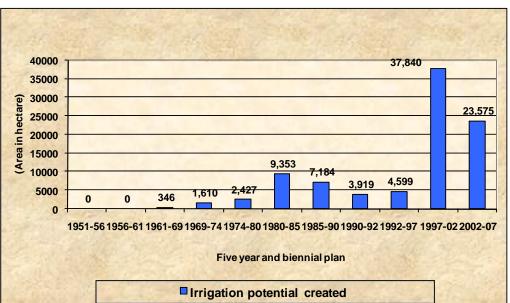


Chart No. 1.1.1

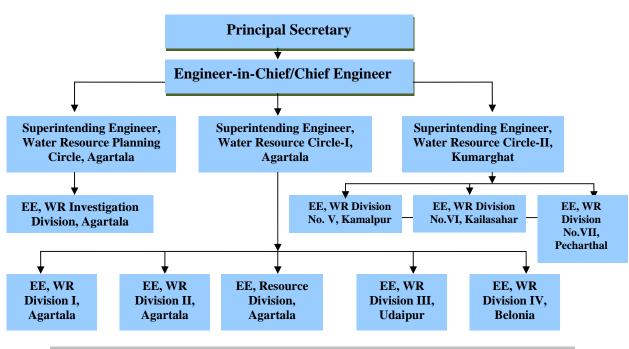
As can be seen from the above chart, there was considerable progress in creation of irrigation potential in 9<sup>th</sup> and 10<sup>th</sup> Plan periods after introduction of the Accelerated Irrigation Benefits Programme (AIBP) in 1996-97.

#### 1.1.2 Organisational Set-up

Minor and medium irrigation schemes are implemented by the Public Works Department (Water Resources), which functions under the administrative control of a Principal Secretary. He is assisted by the Chief Engineer (CE), PWD (WR), three Superintending

<sup>&</sup>lt;sup>1</sup> As per the latest Government publications on the State profile.

Engineers (SEs) and nine Executive Engineers (EEs). The organogram of the Department is given below:



#### **Chart No. 1.1.2**

#### **1.1.3 Scope of Audit**

Implementation of Minor Irrigation Schemes (MIS) during the period 2003-07 was reviewed in audit during 2007, and featured in the Report of the Comptroller and Auditor General of India for the year ended 31 March 2007, which is yet to be discussed in the Public Accounts Committee (PAC). A similar exercise was conducted in audit during November-December 2008 and June- July 2009, through a test-check of the records of the CE, all three SEs and eight out of nine EEs<sup>2</sup> for the period 2004-09. The review covered all the four districts of the State<sup>3</sup>.

#### **1.1.4 Audit Objectives**

The main objectives of the performance audit were to ascertain whether:

- Irrigation potential was created as envisaged and was utilised fully
- Planning for new schemes and prioritisation for funding the ongoing schemes was done in a systematic manner
- Adequate funds were released on time and utilised for the intended purpose
- Individual schemes were executed in an economic, efficient and effective manner within the stipulated time schedule
- Monitoring mechanism was adequate and effective
- There was an adequate and effective mechanism for evaluation of schemes, including assessment of achievement of the desired Benefit Cost Ratio (BCR).

<sup>&</sup>lt;sup>2</sup> WR Division –I, WR Division-II, WR Division-III, WR Division-IV, WR Division –V, WR Division-VI, WR Division VII and WR Investigation Division.

<sup>&</sup>lt;sup>3</sup> West Tripura District, South Tripura District, North Tripura District and Dhalai District.

# 1.1.5 Audit Criteria

Audit findings were benchmarked against the following criteria

- Operational guidelines.
- Annual Action plans and physical and financial targets.
- Project proposals prepared by the Department.

# **1.1.6 Audit Methodology**

An entry conference was held with the Principal Secretary to the Government of Tripura, PWD (Water Resources) on 12 September 2008, wherein the objectives, approach and audit requirements were discussed. One medium irrigation project namely 'Khowai Medium Irrigation Project (KMIP)', 28 minor irrigation schemes (MIS) out of 371 funded through AIBP and 20 out of 70 non-AIBP MIS were selected using Simple Random Sampling without Replacement (SRSWOR) method. Selected samples exclude the schemes covered in the previous Performance Audit referred to at Paragraph 1.1.3 above. Samples selected represent schemes located under different areas of classification of the State. The selected projects/schemes for audit are given in **Appendix 1.1**. The audit findings were discussed in an exit conference with the Principal Secretary on 17 August 2009 and replies have been incorporated wherever appropriate.

## 1.1.7 Planning

As of March 2004, 176 MIS for 10,542 hectares of planned potential involving an estimated cost of Rs. 72.51 crore were in hand for completion. Further, 441 new MIS for 20,040 hectares of planned potential involving an estimated cost of Rs. 131.19 crore were planned to be implemented by the Department during the years 2004-09.

## 1.1.7.1 Survey and Investigation

As per AIBP guidelines, irrigation schemes are to be taken up after carrying out a detailed survey of water requirement and after the hydrological, environmental and ecological aspects of the scheme are assessed. A Detailed Project Report (DPR) is to be prepared for every scheme, identifying the source of water and seasonal discharge of water after factoring in environment and forest clearances. DPRs should also include the detailed cost estimates, Benefit Cost Ratio (BCR), Cultivable Command Area (CCA), intensity of irrigation etc.

Scrutiny revealed that DPRs were prepared in respect of two high capacity Lift Irrigation (LI) schemes<sup>4</sup> and one diversion scheme<sup>5</sup> but were not prepared in 45 out of the 48 MIS (25 LI schemes, 20 DTWs, two high capacity LI schemes and one Diversion scheme) selected in audit. The EEs of the implementing divisions stated (June-July 2009) that only feasibility study was conducted in respect of the LI/DTW schemes before preparation of the preliminary estimates.

<sup>&</sup>lt;sup>4</sup> High capacity LI scheme at Rabindranagar and high capacity LI scheme at Halahalimath.

<sup>&</sup>lt;sup>5</sup> Diversion scheme over Monaicherra under Khowai block.

No DPRs were also prepared for schemes funded from sources other than AIBP and National Bank for Agriculture and Rural Development (NABARD).

However, as can be seen in Paragraph 1.1.10.4, in four LI Schemes out of 48 audited, the availability of water in the source was insufficient, which was not ascertained in the feasibility study. Thus, DPRs should be insisted upon to ensure successful implementation of the MI Schemes.

### **1.1.7.2 Perspective Plan**

The Department did not prepare a long term Perspective Plan from which its own target for creation of irrigation potential during the period of audit-coverage could be ascertained. However, the targets available from the Perspective Plan for minor irrigation for the State as a whole as referred to in the 11<sup>th</sup> Five Year Plan (2007-12) revealed that during 2004-09, creation of irrigation potential of 27,000 ha was targeted for the State. The share of the Irrigation Department as included in their Annual Action Plans was however, 24,742 ha. The year-wise targets and achievements of the Department are shown below.

Year	Phys	ical target		Achievement
	No. of	Potential	No. of	Potential created in ha
	schemes	planned (ha)	schemes	(Percentage)
2004-05	70	3,550	65	2,216 (62)
2005-06	116	4,020	45	1,810 (45)
2006-07	98	4,000	56	2,548 (64)
2007-08 <sup>6</sup>	NA	6,000	NA	2,063 (34)
2008-09	263	7,172	45	1,829 (26)
Total	-	24,742	-	10,466 (42)

Source: Chief Engineer, PWD (WR)

The above table shows that there was shortfall in achievement ranging from 36 *per cent* to 74 *per cent* during the period 2004-09. Reasons for shortfall were not reviewed in the departmental action plans. An attempt to ascertain the reason for the shortfall was made in audit by physical visit to 17 sites and the outcome has been discussed in Paragraph 1.1.10.3. The Department also did not project any fund requirement while preparing the action plans.

#### **1.1.7.3** Assessment of Benefit Cost Ratio (BCR)

Out of 48 MIS test-checked, BCR was assessed in respect of only four MIS (LI scheme at Noabaripara over Maharanicherra, High capacity LI scheme at Rabindranagar over river Gumti, Diversion scheme at Monaicherra and high capacity LI scheme at Halahalimath) and projected in preliminary estimates. BCR in respect of the remaining 44 MIS was neither assessed in the preliminary estimates nor in the detailed estimates though AIBP Guidelines stipulate BCR of more than one. Due to

<sup>&</sup>lt;sup>6</sup> Action plan was not available in the CE's office. Figures showing physical target and achievement in terms of potential created and achievement made were worked out on the basis of economic review of Tripura for the year 2006-07 published by Planning (Statistics) Department, Government of Tripura and leaflet published by PWD (WR).

non-assessment of BCR, the economic viability of those 44 MIS could not be verified. The Department stated in the exit conference that BCR is now being assessed in respect of all new LI schemes.

### 1.1.7.4 Land Acquisition

Schemes were taken up for execution without ensuring prerequisites such as land acquisition and forest clearance. Some instances of commencement of schemes without fulfilling the required prerequisites are discussed below.

#### (i) LI scheme at Rabindranagar

The 'High capacity LI scheme at Rabindranagar' (Planned irrigation potential of 1,000 hectares and target date of completion in March 2007), started in March 2004 against administrative approval and expenditure sanction accorded in January 2003 for Rs. 3.54 crore. For construction of canal, the Department assessed requirement of 6.50 Kani<sup>7</sup> (2.57 acres) of land in the estimate without assessing the length of the canal. The Department took up the land acquisition matter in December 2005 with the Land Acquisition Collector (LAC), West Tripura District after a lapse of 21 months of taking up the work. Out of 95.48 acres of land required for canal (length-9.80 km), only 38.67 acres (length-5.80 km) could be acquired up to November 2008. The Department incurred an expenditure of Rs. 7.20 crore for the scheme towards construction of four intake wells with pump houses, purchase of 10 pump motors, installation of four pump motors in two pump houses, laying of pipe line (1.5 km up to an earthen reservoir), power connection and land acquisition etc. as of May 2009. The construction of canal upto 4.5 km was in progress as of June 2009. The Department in order to arrange additional funds decided (April 2009) to revise the estimates.

Further, the alignment of the canal passes through a reserve forest land (between Ch 2.450 km and Ch 7.700 km). However, the Department had not taken up the matter with the State Forest Department as of June 2009 despite it being mandatory under Forest (Conservation) Act, 1980 which provides that no State Government or other authority shall use forest land for non-forest purposes without the prior approval of the Central Government. Forest (Conservation) Rules 2003 framed thereunder and Government of Tripura, Forest Department's memorandum dated 9 January 2007 also provide for such clearance in advance of taking up of any non-forest activity on the forest land.

Thus, erroneous lump sum estimation of required land for canal and delay in taking up the matter of acquisition of land with the Land Acquisition Collector and Forest Department delayed the scheme for more than two years with cost overrun of Rs. 3.66 crore (Rs. 7.20 crore - Rs. 3.54 crore).

<sup>&</sup>lt;sup>7</sup> One *Kani* is equivalent to 0.16 hectare and One acre is equivalent to 0.405 hectare.

#### (ii) LI scheme at Halahalimath

The 'High capacity LI Scheme at Halahalimath' was sanctioned during 2000-01, at an estimated cost of Rs. 1.44 crore to provide irrigation to 400 hectares of command area. The Department, without final selection of site, acquisition of land and finalisation of alignment of distributory canals, awarded (June 2002) the work<sup>8</sup> to an agency to be completed by July 2003. The pump house was completed and intake well was partially completed while the agency suspended the work (September 2004) mainly due to non handing over of clear site by the Department for construction of canal. The work was rescinded in June 2005 and the balance work (except supply and installation of pump sets) was awarded in November 2007 to another agency. While the work of intake well was almost complete, the second agency also discontinued (November 2008) the work owing to the inability of the Department to hand over clear site for construction of canals. The Department paid Rs.24.34 lakh<sup>9</sup> for the work done by the agencies as of September 2009. Thus, the benefit intended to the beneficiaries was deferred by more than six years as of now besides leading to cost over run which could only be assessed on completion of the scheme.

#### (iii) Khowai Medium Irrigation Project

Land acquisition problems especially in construction of main and branch canals was one of the major causes for delay in completion of the project as discussed in Paragraph 1.1.9.4.

#### **1.1.8 Financial Control**

#### **1.1.8.1 Budgeting and expenditure**

The irrigation projects/schemes were mainly funded from AIBP on a matching basis by the Central and State Government. The Central share of assistance was to be released by way of Central Loan Assistance (CLA), 50 *per cent* of which was repayable in 20 annual instalments along with interest (13 *per cent* per annum). The remaining 50 *per cent* enjoyed an initial grace period of five years and was payable thereafter in 15 annual instalments.

The terms of funding were further relaxed over the years and presently, the GOI funds 90 *per cent* of the project cost in Special Category States (SCS) like Tripura, by way of grants called Central Assistance (CA). The remaining 10 *per cent* is borne by the State Government. SCS that undertook reforms were to get an additional incentive of 100 *per cent* GOI funding. ERM (Extension, Renovation and Modernisation) schemes were also brought under the ambit of AIBP in December 2006.

Year-wise funds received under AIBP from Government of India (GOI) and funds released by State Government against Central and State share and expenditure incurred thereagainst during 2004-09 are shown in the table below:

<sup>&</sup>lt;sup>8</sup> (i) Intake well (ii) Pump house (iii) Priming tank and (iv) Brick lining canal including stilling chambers.

<sup>&</sup>lt;sup>9</sup> 1<sup>st</sup> agency: Rs. 15.36 lakh, 2<sup>nd</sup> agency: Rs. 4.00 lakh, Power connection: Rs. 2.96 lakh and Land acquisition: Rs. 2.02 lakh.

				(Rupees in crore)
Year	Funds release	ed by the State	Total	Expenditure
	Gover	rnment		
	<b>Central Share</b>	State Share		
2004-05	8.00	5.05	13.05	10.52
2005-06	15.80	6.50	22.30	15.26
2006-07	21.57	7.49	29.06	37.97
2007-08	8.10	-	8.10	15.52
2008-09	20.51	1.84	22.35	14.70
Total	73.98	20.88	94.86	93.97
a a				

#### **Table No. 1.1.2**

Source: Chief Engineer, PWD (WR)

Year-wise funds received from sources other than AIBP and expenditure thereagainst during 2004-09 is shown in the table below:

				(1	Rupees in crore)
Funds 1	received	Funds released by the State		Total	Expenditure
		Go	overnment		
NABARD	Additional	NABARD	Additional		
loan	Central	loan	Central		
	Assistance		Assistance		
	(ACA)		(ACA)		
3.63	2.02	3.00	-	3.00	2.65
2.00	-	3.63	2.02	5.65	5.82
6.31	-	3.06	-	3.06	3.23
9.50	-	15.81	-	15.81	6.33
-	-	-	-	-	6.11
21.44	2.02	25.50	2.02	27.52	24.14
	NABARD loan 3.63 2.00 6.31 9.50	Ioan Central Assistance (ACA)   3.63 2.02   2.00 -   6.31 -   9.50 -   - -	NABARD loanAdditional Central Assistance (ACA)NABARD loan3.632.023.002.00-3.636.31-3.069.50-15.81	GovernmentNABARD loanAdditional Central Assistance (ACA)NABARD loanAdditional Central 	Funds receivedFunds released by the State GovernmentTotalNABARD loanAdditional Central Assistance (ACA)NABARD loanAdditional Central Assistance (ACA)Total3.632.023.00-3.002.00-3.632.025.656.31-3.06-3.069.50-15.81-15.81

#### **Table No. 1.1.3**

Source: Chief Engineer, PWD (WR)

#### **1.1.8.2 Release of funds**

Under AIBP, there were no significant delays in release of funds by the State Government to the implementing agencies during 2004-09, except for an amount of Rs. 1.23 crore released during 2008-09 after a delay of 124 days. With regard to NABARD loan for non AIBP schemes however, there were delays ranging from 27 to 103 days in release of funds by the Government during the period 2004-09. Late release of funds was one of the reasons for delay in implementation, as 12 out of 22 completed schemes of the 48 selected samples were completed after delays ranging from six months to one year.

#### **1.1.8.3** Accounting procedure

For energisation of 24 MIS, seven implementing<sup>10</sup> divisions made advance payments aggregating Rs. 0.94 crore to the Tripura State Electricity Corporation Limited (TSECL) between August 2004 and March 2009. Of these 24 schemes, 20 schemes were energised. The entire amount paid to the TSECL was booked as final expenditure although the TSECL did not furnish (June 2009) the adjustments showing the actual expenditure incurred from these advances except for Rs. 0.04 crore adjusted (December 2008) in respect of one MIS. Consequently, the entire amount shown as

<sup>&</sup>lt;sup>10</sup> WR Division No-I, WR Division No-II, WR Division No-III, WR Division No-IV, WR Division No-V, WR Division No-VI and WR Division No-VII.

works expenditure without receiving adjustment thereof resulted in reflection of incorrect picture.

Advance payment of Rs.1.78 crore was made to the LAC, West Tripura district for acquisition of 61.26 acres of land for canal work of 'High capacity LI scheme at Rabindranagar' between August 2006 and February 2009. The LAC did not furnish the adjustment showing the actual expenditure incurred against the advance. However, the entire amount was booked as final expenditure.

# **1.1.8.4 Expenditure on operation and maintenance**

As per AIBP guidelines, expenditure on operation and maintenance of MIS is not permissible from the programme funds. Further, AIBP was introduced in the State only for surface water MIP/MIS. The DTW schemes and flood protection works were, therefore, not covered under AIBP in the State.

Non-permissible expenditure of Rs.82 lakh was incurred from AIBP funds in four out of eight test-checked implementing divisions as detailed below:

- (i) Executive Engineer, WR Division-I, Agartala spent (December 2007) Rs. 13 lakh on execution of different DTW schemes.
- Executive Engineer, WR Division-II, Agartala spent (March 2007) Rs.41 lakh on drilling and development of different DTW schemes, flood protection works and maintenance works of different DTW and LI schemes.
- (iii) Executive Engineer, WR Division-III, Udaipur spent (between October 2005 and September 2006) Rs. 80,000 on maintenance works of different MIS and flood damage repairs.
- (iv) Executive Engineer, WR Division-IV, Belonia spent (between August 2005 and March 2008) Rs.20 lakh on execution and maintenance of different DTW schemes.

# 1.1.8.5 Expenditure without approval

One LI Scheme at South Padmabill, Noidron near Barar Bazar in South Padmabill Gaon-sabha under Panisagar Block was executed by EE, WR Division-VI, Kailashahar under AIBP scheme between 2004-05 and 2006-07. The scheme created a potential of 25 ha against 40 ha originally estimated. Expenditure of Rs. 18 lakh was incurred from AIBP funds for implementation of the said scheme. Scrutiny revealed that the scheme was executed from AIBP funds without approval of GOI, as it was not part of AIBP funded MIS. It was noticed from the utilisation certificates submitted to the GOI that funds received for the years 2004-07 under AIBP were shown as fully utilised by the Department.

# 1.1.8.6 Doubtful reporting

One minor irrigation scheme namely 'LI Scheme at South Padmabill from Dugangacherra' for 50 ha command area under Panisagar Block (Administrative

Approval and Expenditure Sanction accorded in June 2002 for Rs.17 lakh) was included in the list of AIBP schemes proposed for funding by the GOI during 2005-06 and accordingly necessary funds were received from the GOI. The Department reported (November 2008) completion of the scheme to the GOI.

Records in support of implementation of the said scheme under AIBP though called for (November 2008) could not be furnished by the implementing Division (WR Division-VII, Pecharthal). However, audit revealed that another scheme similarly named 'LI Scheme at Dugangacherra in South Padmabill under Panisagar Block' having command area of 60 ha was commissioned in 1994 (*i.e.*, before introduction of AIBP). The matter was reported to the Government in December 2008 and reply had not been received (July 2009). However, a joint inspection conducted in audit with departmental officer (September 2009) revealed that the proposed new scheme does not exist while the similarly named old scheme was found to be functional.

#### **1.1.9 Programme Implementation**

During 2004-09 against a plan of creating irrigation potential for 24,742 ha the Department could create only 10,466 ha constituting 42 *per cent* of the potential planned during last five years.

A graphic representation of the irrigation potential planned and potential created during 2004-09 has been made in **Chart 1.1.3** below:

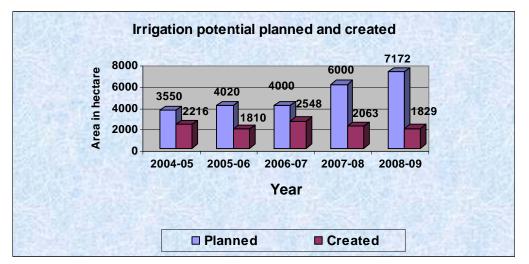


Chart No. 1.1.3

There is no major irrigation project in Tripura. Three Medium Irrigation Projects (MIP) namely (i) Gumti Medium Irrigation Project (ii) Khowai Medium Irrigation Project and (iii) Manu Medium Irrigation Project were sanctioned by the Planning Commission in January 1979, March 1980 and February 1981 respectively. Prior to the introduction of AIBP, all the three MIPs were languishing for want of funds. These projects were included for funding under AIBP during 1996-97.

# 1.1.9.1 Khowai Medium Irrigation Project (KMIP)

Khowai Medium Irrigation Project (KMIP) was taken up for implementation during the year 1980-81, at an estimated cost of Rs. 7.10 crore for an envisaged potential of 4,515 hectares Cultivable Command Area (CCA). The project was originally targeted to be completed by March 1985. It was yet to be completed as of June 2009. The latest revised estimated cost of the project was Rs. 76.80 crore at 2002 price level. An expenditure of Rs. 76.81 crore was incurred on the project as of March 2009. Scrutiny of project implementation revealed the following.

## **1.1.9.2 Revised estimates**

The Central Water Commission (CWC) intimated (December 2005, December 2006, July 2007 and July 2008) that the revised estimate (Rs. 76.80 crore) of KMIP sent by the State PWD (WR) in October 2005 needed amendments, as it was not as per guidelines of CWC/ Planning Commission. However, revised estimates were yet to be prepared by the State Public Works (WR) Department as of July 2009.

Meanwhile, the total expenditure (Rs.76.81 crore) had already exceeded the revised estimated cost and an amount of Rs.1.25 crore was pending for payment to the agencies as of July 2009.

## 1.1.9.3 Progress of KMIP

The barrage portion of KMIP was completed in 1996-97 before inclusion of the project in the AIBP. Only the canal systems were implemented under AIBP. The details of physical progress of the canal systems as of June 2009 are given in **Appendix 1.2**. As can be seen from this Appendix, even after spending over 100 *per cent* (Rs.76.81 crore) of the revised cost (Rs. 76.80 crore), the Department could construct only 28.02 km of the main canal constituting 89.84 *per cent* of the target (31.19 km) and only 3.58 km of the branch canals constituting 13.94 *per cent* of the target (25.68 km). Only 23.92 *per cent* (1,080 ha) of the targeted irrigation potential (4,515 ha) could be achieved during 1996-97 to 2008-09 due to non-execution/ non-completion of the works coupled with land problems in different chainages of the main canals and branch canals.

## **1.1.9.4 Execution of canal works**

Scrutiny revealed that in the following two cases, the progress of canal work was delayed due to departmental lapses in survey and acquisition of land:

(i) Alignment of left bank canal of KMIP passes through a reserve forest of 0.34 acre (approximately 50 metre length) located between Ch 4.20 km and Ch 4.33 km of the left bank main canal. The Department was required to take up the matter with the Forest Department well in advance for obtaining prior approval from the Union Ministry of Environment and Forests (MoEF) under the Forest (Conservation) Act, 1980. The Department approached the State Forest Department in this regard only in March 2007, after a lapse of about ten years from the inclusion of the canal works in AIBP. The photograph below shows the discontinuation of canal at reserve forest area.



The unexecuted portion of Khowai Left Bank main canal at Reserve Forest Area, Gamaibari

(ii) The canal work at Ch 9.79 km to Ch 13.50 km of right bank main canal of KMIP was awarded to an agency in May 1999. The work, scheduled to be completed in November 1999, could not be completed and was discontinued sometime in 2002 owing to land dispute. The work was again awarded to the same agency in July 2005, with one year time for completion without getting possession of the entire stretch of land required for the canal. The work could not be completed as of June 2009. The EE attributed the delay to land dispute and requirement of additional work in marshy land. The Government stated in the exit conference (August 2009) that the project would be completed by 2009-10. The photograph below shows discontinued right bank canal due to land dispute and marshy land.



Discontinued Khowai Right Bank main canal due to land dispute and marshy land

# 1.1.9.5 Utilisation of created potential in KMIP

Against the targeted potential of 4,515 ha (CCA), the created potential of KMIP was 1,080 ha (CCA) up to March 2009. The Agriculture Department intimated (July

2009) that only a potential of 250 ha (23.15 *per cent*) could be utilised due to nondevelopment of branch canals. Audit scrutiny however, revealed that there were delays in construction of the main canal due to non acquisition of land and the requisite approvals as brought out in the preceding paragraphs resulting in shortfall in creation of potential. The photograph below shows the undeveloped and damaged branch canal.



Undeveloped and damaged portions in Khowai Right Bank branch canal breaking the continuity in flow of water

#### **1.1.10 Physical performance**

During the period 2004-09, 343 MIS (320 LI, five high capacity LI, 17 diversion schemes and one rain water harvesting reservoir) were sanctioned under AIBP against which, 341 MIS were taken up for execution and the remaining two MIS<sup>11</sup> were dropped. Out of the implemented schemes, 270 were completed and 71 were in progress as of March 2009.

The Chief Engineer, PWD (WR) could not furnish information regarding year-wise and scheme-wise position of MIS to be implemented from funds other than AIBP due to non-maintenance of database/records. However, it was noticed from the sanction register maintained in the Works Section of the CE's office that 42 new DTW schemes were sanctioned during 2004-09 from sources other than AIBP, against which, eight schemes out of 27 taken up for execution were completed.

## **1.1.10.1 Target and achievement**

## (i) Schemes funded from AIBP

According to the guidelines of AIBP, MIS sanctioned by the GOI should be completed within a period of two years. During the last ten years, MIS taken up under AIBP and completed within the targeted period of two years are given in the table below:

<sup>&</sup>lt;sup>11</sup> LI scheme at Ghasia over Dagducherra under Mandai Block and LI scheme at Chanditala (Banbazar) under Tulasikhar Block.

					(Area in ha)
Year of sanction	No. of MIS	Potential targeted	Scheduled date of completion	Number of schemes completed within targeted period	Potential created
1000 0000	220	10.505	1 2001	(percentage)	(percentage)
1999-2000	330	13,527	March 2001	118	9,780
2000-01	134	6,474	March 2002	33	1,460
2001-02	80	3,201	March 2003	42	1,431
2002-03	220	7,966	March 2004	87	3,114
2003-04			No scheme wa	s sanctioned during the year	
2004-05			No scheme was	s sanctioned during the year	
2005-06	174	7,632	March 2007	129	4,108
2006-07	80	2,953	March 2008	34	1,321
2007-08 <sup>12</sup>	87	4,208	March 2009	39	1,096
2008-09 <sup>13</sup>	-	-	-	-	-
Total	1,105	45,961		482(44)	22,310(49)

Table No. 1.1.4

Source: Chief Engineer, PWD (WR)

The above table shows that the Department could complete 44 *per cent* of the schemes and achieve 49 *per cent* of the targeted potential within the scheduled period. The reasons for delay in completion of 25 selected MIS have been shown in the **Appendix 1.3**.

#### (ii) Schemes funded from sources other than AIBP

Implementation of schemes from sources other than AIBP funds is very meagre in the State. The year-wise status of implementation of ongoing schemes from non-AIBP funds during the last five years is as under:

Year	Number of schemes taken up	Planned CCA (ha)	Estimated cost (Rs. in crore)	Status of completion	Potential created (ha)	Up to date expenditure (Rs. in crore)	
As on 31.3.2004	1	1,950	40	Head work nearing completion and canal work is in progress	-	22.52	
2004-05	10	217	1.48	8 completed and 2 in progress	110	1.01	
2005-06	Nil	Nil	Nil	Nil	Nil	Nil	
2006-07	39	819	7.01	1 completed and 30 in progress 8 not started	14.08	1.07	
2007-08	12	284	1.77	Not started	-	-	
2008-09	9	202	1.35	Not started	-	-	
Total	71	3,472			124.08		

**Table No. 1.1.5** 

Source: Chief Engineer, PWD (WR)

Seventy out of seventy one ongoing schemes were Deep Tube Wells, of which the work of 29 could not be started as of July 2009, due to non-availability of suitable executing agency. Though the scheduled date of completion expired, the potential created from these ongoing schemes during the past five years was less than four *per cent* (124.08 ha out of 3,472 ha) of the projected potential. The biggest of the said projects (Muhuri Irrigation Project) taken up in March 2001 with a targeted potential of 1,950 ha is languishing mainly due to non availability of basic survey data, shifting

<sup>&</sup>lt;sup>12</sup> The CE,PWD(WR) furnished (July 2009) provisional figure for the year.

<sup>&</sup>lt;sup>13</sup> During 2008-09, 30 MIS under AIBP were yet to be sanctioned by the GOI, the scheduled date of completion of which does not fall within March 2009.

of barrage location, delay in providing power line to the work site, and delay in acquisition of land etc.

The Chief Engineer, PWD (WR) could not furnish information regarding schemewise and year-wise target and achievement of the MIS implemented from funds other than AIBP due to non-maintenance of database/records.

### 1.1.10.2 Reporting to GOI

One LI scheme at North Dabbari Panchayat (CCA 30 ha) under Executive Engineer, WR Division No. V, Kamalpur with an estimated cost of Rs.17 lakh and target date of completion of March 2007 was reported (November 2008) by the State PWD(WR) to the Ministry of Water Resources (MoWR), Government of India as completed during 2007-08, though the work of laying and distribution of pipe lines had not commenced as of July 2009.

The Government is yet to reply, though the matter was reported in December 2008 and again in August 2009.

#### 1.1.10.3 Achievement of potential

Scrutiny of 48 selected MIS revealed that only 22 MIS were completed out of 38 scheduled to be completed as of March 2009. Out of 22 completed schemes, the achievement of irrigation potential of 17 schemes was below the targeted potential as detailed in Table No. 1.1.6.

					(In hectares)
Sl. No.	Name of MIS	Irrigation potential planned	Potential created as assessed by the PWD (WR)	Short achievement of potential (in percentage)	Reasons
_1.	LI Scheme at Berimura Phase-II in Fatikcherra G/S	60	50	10 (17)	No reason was on record. Probability of incorrect estimation of planned potential can not be ruled out.
2.	LI Scheme at Noagaon Fatikcherra Phase-III	60	50	10 (17)	-do-
3.	LI Scheme at Noagaon Fatikcherra Phase-IV	60	50	10 (17)	-do-
4.	LI Scheme at Naprai Sardarpara from river Sonai	40	36	4 (10)	-do-
5.	LI Scheme at Tuisama (Chandul ADC) near Lailongbari J.B. School	35	30	5 (25)	-do-
6.	DTW Scheme at Rahimpur (Baramaidan)	20	15	5 (25)	Pipe line for full length not laid.
7.	LI Scheme at Purba Rangamati-II	22	20	2 (9)	Extension of pipe line required.
8.	LI Scheme at Chandrakiran para	25	20	5 (20)	Pipe line for full length not laid.
9.	LI Scheme at Bhagyamani Chakmapada from Gaburcherra Phase-II	35	16	19 (54)	Distribution system not done up to optimum limit.

#### **Table No. 1.1.6**

Sl. No.	Name of MIS	Irrigation potential planned	Potential created as assessed by the PWD (WR)	Short achievement of potential (in percentage)	Reasons
10.	LI Scheme at West Lamboo	30	25	5 (17)	Extension of pipe line required.
11.	LI Scheme at South Masauli over river Manu	30	25	5 (17)	Pipe line for full length not laid.
12	DTW Scheme at Balugang Mekhliband	20	16	4 (20)	Damaged pipelines.
13	DTW Scheme at Brahman Puskarini	20	14	6 (30)	Inadequate pipelines.
14	DTW Scheme at Rangutia West	25	14	11 (44)	Damaged pipelines.
15	DTW Scheme at Muktarlunga para	20	15	5 (25)	Inadequate pipelines.
16	DTW Scheme Nirvoypur	20	10	10 (50)	Low discharge of water from the well.
17	DTW Scheme at Rupaichari near the house of Mangsajai Mog	20	15	5 (25)	Distribution pipe lines were not adequate.

Source: Divisional records and audit inspection.

Out of 17 MIS shown in the above table, 10 were under AIBP, five under Additional Central Assistance and two under NABARD loan fund. Field visit by audit revealed that although the schemes were completed, full benefits from these schemes could not be harnessed for reasons cited in the Table above.

#### 1.1.10.4 Utilisation of created potential

Scrutiny of six<sup>14</sup> implementing divisions revealed that in the following 10 out of 22 completed schemes, there were gaps between the potential created as claimed by the PWD (WR) and potential being utilised as reported by the Agriculture Department which is shown in the table below:

				(In hectares)
Name of MIS	Potential created as assessed by the PWD (WR)	Potential utilised as reported by the Agriculture Department	Percentage of Shortfall	Reasons stated by the Agriculture Department
LI Scheme at Berimura Phase-II in Fatikcherra G/S	50	15	70	Insufficient water at the source
LI Scheme at Noagaon Fatikcherra Phase-III	50	25	50	-do-
LI Scheme at Noagaon Fatikcherra Phase-IV	50	15	70	-do-
LI Scheme at Kalibari-II over Lalcherra	40	15	63	Extension of pipe line needed
LI Scheme at Naprai Sarderpara at river Sonai	36	Nil	100	Theft of pump machine
DTW Scheme at Rahimpur (Baramaidan)	15	5	67	Damage of pipeline
LI Scheme at Chandrakiran para	20	12	40	Reasons not furnished
LI Scheme at Maithulong (Conv)	20	2.5	88	Damage of pipeline
LI Scheme at West Lamboo	25	20	20	Insufficient water at the source
LI Scheme at South Masauli over river Manu	25	10	60	Leakage of pipe line

#### **Table No. 1.1.7**

Source: Divisional records.

<sup>&</sup>lt;sup>14</sup> WR Division No. I, WR Division No. II, WR Division No. III, WR Division No. IV, WR Division No. V. and WR Division No. VI.

The above table shows that the shortfall in utilisation of irrigation potential created in 10 out of the 22 completed schemes selected for audit ranged between 20 and 100 *per cent*. Out of 10, in four schemes<sup>15</sup> shortfall was attributed to insufficient water at the source. Scrutiny of the feasibility study reports of the schemes revealed that the reports did not specify the availability of water at source. The Government in exit conference (August 2009) stated that the utilisation of irrigation potential should be assessed on the basis of aggregate utilisation of potential by multiple cropping. However, it accepted that in some schemes physical construction of canals were yet to be completed.

#### **1.1.10.5 Execution of schemes**

Out of 22 completed MIS, 10 MIS were completed within the targeted period and the remaining 12 were completed after delays ranging from six months to one year. One MIS does not exist as detailed in paragraph 1.1.8.6.

The details of physical progress of the 25 incomplete schemes out of the selected 48 MIS are given in **Appendix 1.3**.

As can be seen from the details in **Appendix 1.3**, execution of 25 out of the selected 48 MIS was delayed for periods ranging from four to 72 months both due to lack of co-ordination with other departments/Tripura State Electricity Corporation Limited and delays within the Department.

# **1.1.11 Joint Inspection**

(i) During joint visit of audit and departmental officials on 3 November 2008, it was noticed that 'LI Scheme at Bhagyamani Chakmapara from Gaburchhera phase-II under Hrishyamukh block' completed in January 2008 was not functioning due to defects in the electric transformer. The concerned Sub-Divisional Officer later intimated (December 2008) that the scheme had started functioning since 5 November 2008, after replacement of defective transformer *i.e.*, two days after the joint visit. During revisit by audit on 24 September 2009, the transformer was found to be functioning. However, the foot valve with suction pipe in the river was filled with sand, for which water could not be lifted through the suction pipe for past two months. The sand filled foot valve can be seen in the photograph below:

<sup>&</sup>lt;sup>15</sup> Sl.No. 1, 2, 3 and 9 of table No.1.1.7.



Sand filled foot valve at Bhagyamani Chakmapara LI Scheme

(ii) 'LI scheme of Nutanpally-1 from Kalapaniacherra under Satchand Block' was taken up under AIBP during 2006-07, to be completed by March 2008. During a joint visit (June 2009), it was seen that the scheme was yet to be completed. Although the pump house was completed, pump sets were not installed in the pump house and suction pipe from intake point of the source was not laid.

The pipe laying in the command area was partially completed for 1,072 metres out of 2,746 metres. Energisation of the scheme was not done and the electric transformer erected by the TSECL along with two poles had collapsed as depicted in the photograph below. The transformer though erected again was not energised. The scheme is yet to be operational as of June 2009.



Photograph showing the collapsed pole and reinstalled transformer without energisation

(iii) During joint visit (June 2009) of 'DTW scheme at Rahimpur (Baramaidan) under Boxanagar Block' completed in March 2009 with created potential of 15 ha it was found that few pipe lines of length about 450 metres out of 2,275 metres were missing at different points. Handing over of the scheme to the Panchayat was pending. In absence of regular operator, the scheme was functioning by engaging pump operator from other scheme on emergent basis. One farmer expressed grievance for not forming water user committee and also not distributing the water to irrigate the fields properly.

(iv) The DTW scheme at Nirvoypur completed in April 2007, originally estimated to discharge 7,500 GPH, was found to have a discharge capacity of only 4,000 GPH after commissioning. After reassessment the scheme was expected to cover only 10 ha instead of covering 20 ha as estimated originally. Besides, the distribution pipe lines and hydrants were also not laid.



Photograph showing low discharge of water in Nirvoypur DTW scheme

During joint visit (October 2009) it was observed that the discharge was significantly low and was able to cover only 5 ha as can also be seen from the above photograph.

## **1.1.12 Quality Assurance**

For quality control, the CPWD manual provides for a chain of properly equipped testing laboratories at different levels *viz*. (i) field testing laboratories under the control of the Executive Engineers at division levels, (ii) testing laboratories at circle level under the control of the Superintending Engineers and (iii) Central laboratory at State level. Further, guidelines of AIBP also envisaged that the State Government shall ensure required quality control in the execution of works. However, it was noticed that field testing laboratories at division level or testing laboratories at circle level had not been set up.

Test-check revealed that out of 48 selected MIS, only in one MIS "High capacity LI scheme at Rabindranagar" cement concrete cubes were tested for twelve samples between January 2006 and March 2009 in the departmental laboratory at Agartala. While no adverse report was found, no documents in support of material test, compaction test, sand test etc. could be furnished to audit.

## **1.1.13 Operation and maintenance**

As per the guidelines issued by the State Government (July 2000), the Minor Irrigation Schemes are to be handed over to the concerned Panchayat/ Block Advisory Committee (BAC) after completion and all maintenance and repair works except major repairs (like changing of pump and motors, extension of pipe lines) are to be done by the Panchayat/ BAC. For this purpose, an amount of Rs. 50 per  $Kani^{16}$  per crop was to be collected from the users for meeting the operation and maintenance cost.

Scrutiny of the implementing divisions revealed that maintenance and repair works of all completed schemes under the divisions were done by the PWD (WR) in violation of the above guidelines. 21 out of 48 selected schemes were handed over to the Panchayat/BAC. Interaction with the villagers/farmers during joint visit of the four<sup>17</sup> handed over schemes revealed that after construction of the schemes, the farmers felt benefited but expressed their concern about regular maintenance and repairs of the schemes. As the Panchayats were not in a position to undertake such maintenance/repair works due to paucity of funds and technical know how, the PWD (WR) had to carry out the petty repairing and maintenance works, which normally took time. Due to such time gap in taking up the repairs and maintenance work, it was observed in audit that the operations of the schemes were frequently hampered.

# **1.1.14** Monitoring and Evaluation

# 1.1.14.1 Monitoring

The guidelines of AIBP envisaged that monitoring of the MIS has to be done by the State Government through agencies independent of the construction agencies. Test-check of records revealed that no such independent agency has been engaged by the Department for monitoring the MIS.

The Chief Engineer stated (July 2009) that the MIS were monitored by one Superintending Engineer independently within the Department. This claim could not however, be confirmed in audit due to absence of supporting documents.

#### 1.1.14.2 Assessment of irrigation potential

The National Remote Sensing Agency (NRSA), Hyderabad, was assigned by the MoWR/Planning Commission to map irrigation infrastructure of Khowai and Gumti Irrigation projects by use of high resolution Carto Satellite data. For this purpose, prescribed draft project-wise field/office data was required to be supplied to the NRSA by the Department to carry out the remote sensing work. The Department furnished the data to the NRSA after a lapse of 21 months (August 2008) after being informed by the GOI (November 2006).

The Department furnished (October 2008) some further information to the NRSA regarding irrigation potential created, length of the irrigation canals etc. in which Annual Irrigable Area (AIA) of the KMIP was stated as 9,933 ha (upto November 2008). The NRSA requested (December 2008) the Department to clarify the reasons why the potential created (9,933 ha) had exceeded the targeted potential (9,320) of the

 $<sup>^{16}</sup>$  1 Kani = 0.16 hectare.

<sup>&</sup>lt;sup>17</sup> LI schemes at Berimura phase II in Fatikcherra G/S, Noagaon Fatikcherra phase III, Noagaon Fatikcherra phase IV, Noabaripara over Maharanicherra.

KMIP, whereas many of the structures were still in progress. No clarifications were furnished by the Department to the NRSA as of July 2009. Further, in regard to Gumti Medium Irrigation Project, the Central Water Commission requested (March 2009) the Department to examine and communicate comments on the difference in irrigation potential created as reported by the State Government to the CWC with that revealed by satellite imagery carried out by the National Remote Sensing Agency. The Department was yet to communicate comments to the Central Water Commission as of July 2009.

## 1.1.14.3 Statistical Cell

State Government created (February 2001) a Statistical Cell headed by an Executive Engineer under the direct control of the Chief Engineer with cent *per cent* Central assistance under Centrally Sponsored Scheme 'Rationalisation of Minor Irrigation Statistics'. One of the main tasks of the Cell was to co-ordinate collection and compilation of statistics relating to minor irrigation schemes. Information regarding year-wise and scheme-wise target and achievement, up to date progress etc. for minor irrigation schemes implemented from sources other than Accelerated Irrigation Benefit Programme has not been maintained by the Cell.

#### 1.1.15 Conclusion

The envisaged benefits of irrigation schemes could not be achieved due to inherent defects in planning, delays in acquisition of land and clearance from forest authorities. Irrigation potential of only 10,466 hectares was created during 2004-09 against the target of 24,742 hectares. Further, even the potential created could not be utilised due to insufficient water at the source, non-laying of pipes to the full extent to cater to the targeted beneficiaries. The Department has not evolved an adequate monitoring mechanism to speed up the completion of ongoing schemes and evaluate the outcome of the completed schemes.

## **1.1.16 Recommendations**

- The schemes should be planned in their entirety in advance, so as to address the complex and sensitive issue of land acquisition.
- The Department should carry out Benefit Cost Ratio and prepare Detailed Project Reports in respect of all the projects before taking up irrigation schemes.
- The Department should enforce a strict implementation schedule for all the schemes and fix responsibility for delays.
- The Department should maintain a central database of all the schemes to enable effective monitoring and follow up.
- Reasons for shortfall in achievement of planned potential and under-utilisation of created potential should be reviewed and necessary corrective measures taken.

# **EDUCATION (HIGHER) DEPARTMENT**

#### 1.2 Functioning of Education (Higher) Department

The Education (Higher) Department is responsible for providing higher education to the youth in the State, in order to equip them with adequate skills for furthering their chances of success in the competitive environment ahead. A performance audit on the functioning of the Department brought out the absence of an appropriate planning process in the Department. The Department does not have vital data from the educational institutions to plan its activities effectively. This, coupled with shortage of teaching staff and absence of monitoring mechanism affected the objective of the Department of providing quality education to the students.

Planning process was devoid of basic statistical inputs, since there was no mechanism for collection of relevant information from the educational institutions.

(Paragraph 1.2.7.3)

During 2004-09, while Rs. 63 crore were released by GOI against 11 projects under Additional Central Assistance and four projects under Non-Lapsable Central Pool of Resources (NLCPR), the State Government released Rs.42.86 crore to the implementing agencies, of which, only Rs.18.40 crore were spent by the Department.

The Department does not have any mechanism to monitor the physical and financial progress of the projects.

#### (Paragraph 1.2.9.2)

The Department had an overall shortage of 807 posts in 45 categories, of which, 328 were teaching posts. Though, the Annual Action Plans (2007-10) projected recruitment of 646 staff during the review period, only 301 staff (47 *per cent*) were recruited as of June 2009.

#### (Paragraph 1.2.11)

Against University Grants Commission prescribed norm of 1:20 teacher-student ratio in General Colleges, the teacher-student ratio was 1:63 in the State as of September 2008.

#### (Paragraph 1.2.11.1)

## **1.2.1 Introduction**

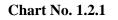
The Education (Higher) Department is responsible for providing higher education both general and technical to equip the youth with adequate skill to earn decent livelihood. As per Census 2001, the State has a literacy rate of 73 *per cent* (Male: 81 *per cent* and Female: 65 *per cent*).

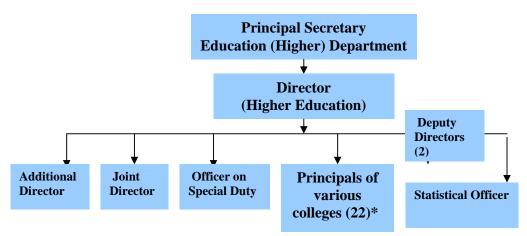
The institutions imparting higher education in the State include 15 General Degree Colleges, three Technical, one Law, one Music, one Arts and Crafts and one Institute

of Advanced Studies in Education. Besides, one National Institute of Technology (NIT), two Medical Colleges, two Institutions for various professional courses (Institute of Chartered Financial Analysts of India and Bhavans' College) also cater to the higher education needs of the State although these are not under the administrative control of the Education (Higher) Department. The combined intake capacity in general and technical education (19,613 in 2008-09) was more than the number of students passing out at the Higher Secondary (HS) level (12,084 in 2008-09) from the State Board. However, a sizeable number of students (about 13 *per cent* of students passing HS + 2 from the State Board on an average) had migrated outside the State in pursuit of higher education during the period under review. The number would be larger, if students passing out from CBSE and ICSE courses are also considered.

## 1.2.2 Organisational Set-up

The Department is headed by a Principal Secretary, who is the administrative head. He is assisted by the Director of Higher Education (DHE) who is responsible for the implementation of the policies of the Government relating to higher education. An organogram of the Department is shown below:





\* Maharaja Bir Bikram College, Bir Bikram Memorial College, Womens' College, Ramthakur College, Kabi Nazrul Mahavidyalaya, Netaji Subhash Mahavidyalaya, GDC, Belonia , Michael Madhusudhan Dutta College, GDC, Amarpur, Dasarath Deb Memorial College, Khowai, GDC, Kamalpur, Ambedkar College, GDC, Dharmanagar, Ram Krishna Mahavidyalaya, Kailashahar, Khumlwng College, Tripura Institute of Technology (Degree), Tripura Institute of Technology (Diploma), Womens' Polytechnic College, Tripura Government Law College, Music College, College of Arts and Crafts, Institute of Advanced Studies in Education.

## **1.2.3 Scope of Audit**

The review covered the functioning of the Department during 2004-09. Out of 28 auditable units,  $13^1$  units consisting of 10 colleges, Government Museum, State Central Library and the Directorate of Higher Education with an expenditure of

<sup>&</sup>lt;sup>1</sup> (i) Directorate of Higher Education and State Archive, (ii) MBB College, (iii) Ramthakur College, (iv) GD College, Belonia, (v) MMD College, Sabroom, (vi) GD College, Dharmanagar, (vii) Ramkrishna Mahavidyalaya, Kailashahar (viii) KNM College, Sonamura (ix) DDM College, Khowai (x) College of Arts and Crafts, (xi) Music College, (xii) Government Museum, and (xiii) Birchandra State Central Library.

Rs.87.78 crore (representing over 42 *per cent* of total expenditure during 2004-09) were selected for detailed scrutiny. The review was conducted during April-June 2009 through a test-check of records of the selected units.

# **1.2.4 Audit Objectives**

The audit objectives were to assess the effectiveness of the functioning of the Department on the following parameters:

- Planning
- Budgetary and financial management
- Programme implementation
- Human resource management
- Monitoring.

# 1.2.5 Audit Criteria

Audit findings were benchmarked against the following criteria:

- Perspective plan and annual action plan
- Departmental policies/rules and regulations
- Government notifications/guidelines
- General Financial Rules
- Central Treasury Rules
- Prescribed monitoring mechanism.

# **1.2.6 Audit Methodology**

An entry conference was held on 8 May 2009 with the Principal Secretary, Education Department wherein audit objectives, scope and criteria were explained. Test-check of records of the Directorate of Higher Education, selected Colleges, Libraries etc. was conducted with reference to the audit objectives and criteria. Information collected from the Department, observations during site visits and replies to questionnaires form the basis of audit evidence and audit findings.

Exit conference was held on 8 September 2009 with the Principal Secretary and the results of discussion have been suitably incorporated in the report at appropriate places.

# 1.2.7 Planning

# **1.2.7.1 Perspective Plan**

In order to develop human resources at the post school stage and enable the youth to acquire necessary skills to exploit the available opportunities both inside and outside the State, the Department formulated a Perspective Plan (2008-13), which envisaged the following:

- Setting up colleges in those Sub-Divisions, which do not have one but require a college based on the aspiring student strength
- Extension of technical education and Polytechnic institutes in a phased manner
- Strengthening and expansion of infrastructure of all Institutions from primary to college levels
- Extending the scope/availability of technical education by setting up advanced technical institutes with Public Private Partnership (PPP)
- Strengthening and expansion of training infrastructure and inter linking educational curricula with teaching system and training of teachers
- Making the training relevant to present day needs by constant evaluation.

The above activities were contemplated to be achieved on the basis of the following three pronged approaches:

- (i) Facilitating students to pursue higher education outside the State
- (ii) Augmenting the existing facilities in the Government sector for imparting higher education and
- (iii) Promoting private entrepreneurs for setting up institutions in the State.

The details of implementation of the Perspective Plan are discussed in the succeeding paragraphs.

# **1.2.7.2 Enrolment in higher education**

In keeping with the increasing HS+2 passout students in the State, the Department had emphasised in the Action Plans 2007-09 to increase intake capacity of existing Degree Colleges of the State at least by 10 *per cent* per annum and making provision for development of infrastructure. The overall enrolment of students in higher education during 2004-09 is as follows:

Year	No. of students passed HS+2 stage	Total intake capacity in the degree colleges	Total no. of students enrolled in the Degree colleges in the State (percentage of students enrolled vis-a-vis the intake capacity)	Total no. of students enrolled for 13 <sup>2</sup> professional courses outside the State through Tripura Joint Entrance Exam. (TJEE)
2004-05	8,567	NA	8109	107
2005-06	8,917	18,291	8,877 (49)	96
2006-07	10,101	18,957	9,054 (48)	102
2007-08	11,421	19,097	9,752 (51)	124
2008-09	12,084	19,613	13,243 (68)	126

Table	No.	1.2.1
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Source: Departmental figures.

The average per year increase in enrolment of students in the State Degree Colleges (after HS + 2 stage) during 2005-06 to 2007-08 ranged from 2 *per cent* to 9 *per cent* 

<sup>&</sup>lt;sup>2</sup> MBBS, BDS, B.Pharma, BAMS, BHMS, B.Sc (Nursing), B.Sc (MLT), B.Sc (Horti), B.Sc (Agri), BFSc, BVSc, B.Sc (Home Sc) and B. Tech (Agri).

of the previous year, which suddenly shot up to 36 *per cent* during 2008-09. On the other hand, the capacity utilisation ranged between 48 *per cent* and 68 *per cent* only. Besides, 1,096 to 1,762 students had taken Migration Certificates from the Tripura Board of Secondary Education (TBSE) for availing higher education outside the State.

In the absence of basic data on age-wise population, the actual trend of enrolment compared to the eligible population could not be worked out.

# **1.2.7.3** Statistical inputs

In order to prepare an effective Annual Action Plan for development of higher education in the State, collection and documentation of year-wise and age-wise (18-24) disaggregated data of eligible students for higher education is an essential prerequisite. Some vital indices like Gross Enrolment Ratio (GER), Gender Parity Index (GPI) and other critical indicators of the State are derived from these inputs, based on which, the Department was supposed to formulate action plan for addressing the needs of the targeted section.

During test-check it was noticed that there was no periodic system of collection of relevant information from the educational institutions in a systematic manner. A statistical cell, though exists, was not effective as the cell is yet to tabulate even GER, GPI of the State. An analysis of eight test-checked colleges<sup>3</sup> revealed that the colleges were maintaining data only for boys-girls ratio. In the absence of relevant and updated data, the planning process to formulate Action Plans was devoid of basic statistical inputs.

It was, however, noticed from the abstracts of Educational Statistics published by the Ministry of Human Resource Development, Government of India that the percentage of GER for higher education in the State ranged from 6.16 *per cent* to 6.83 *per cent* during the period from 2004-05 to 2006-07 as against National average of 11.30 *per cent* during the corresponding period.

In the conference of State Education Ministers, held at New Delhi on 10-11 April 2007, it was agreed to make special effort to raise GER for Higher Education up to the National average with suitable assistance from the Central Government. The Department neither formulated action plan to achieve this agreed objective nor did incorporate any policy in the Annual Action Plans of 2007-09. Consequently, no Special Central Assistance for enhancing the rate of GER for higher education in the State could be availed till date (June 2009).

During exit conference (September 2009), the Government accepted the need for improvement in the functioning of the Statistical Cell and assured that the Cell would be revamped.

<sup>&</sup>lt;sup>3</sup> (i) MBB College, (ii) Ramthakur College, (iii) GD College, Belonia, (iv) MMD College, Sabroom, (v) GD College, Dharmanagar, (vi) Ramkrishna Mahavidyalaya, Kailashahar (vii) KNM College, Sonamura (viii) DDM College, Khowai.

(Runaas in crora)

# **1.2.8 Financial Management**

#### **1.2.8.1** Allocation of funds

An analysis of funds released and actual expenditure incurred during 2004-09 revealed that while the expenditure on higher education accounted for 5.04 *per cent* of the total expenditure on Social sector during 2005-06 it declined to 2.74 *per cent* during 2008-09 as detailed in Table 1.2.2 below:

				(Rupees in crore)
Year	Expenditure on	Expenditure on	Expenditure on	Percentage of expenditure on
	Social Services	<b>Education Sector</b>	<b>Higher Education</b>	<b>Higher Education to Social Services</b>
2004-05	1,009.94	595.68	43.33	4.29
2005-06	1,029.11	506.21	51.88	5.04
2006-07	1,099.45	523.36	33.25	3.02
2007-08	1,277.14	579.69	34.08	2.67
2008-09	1,541.61	648.46	42.20	2.74
a n				

#### **Table No. 1.2.2**

Source: Finance Accounts

The Government had no target for allocation of funds for higher education with reference to its total allocation on Social Services.

During exit conference (September 2009) the Government stated that though no specific target was fixed for investment in higher education, there was substantial increase in the recent past. However, the above table do not corroborate with the statement. The Principal Secretary also asserted that as the State is largely dependent on Central grants, it is difficult to plan in advance.

#### 1.2.8.2 Budgeting

Finance Department (FD) fixes the upper limit of the probable outlay in respect of each department in advance. During the period under review (2004-09), the Education (Higher) Department prepared its budget proposals in consultation with the Planning and Coordination Department without obtaining any documented inputs from field units. In the absence of documentation, examination of budget to fulfill long term requirements of individual Institution could not be ascertained.

The budgetary allocation for the Department under Grant No. 39 during the last five years ranged between Rs.34.27 crore and Rs.39.42 crore under Revenue Account and Rs.8.72 crore and Rs.22.36 crore under Capital Account as detailed in Table 1.2.3.

						(Kupees in crore)	
Year		Budget Expenditure					
	Revenue	Capital	Total	Revenue	Capital	Total	
2004-05	34.27	17.58	51.85	32.14 (93.78)	11.19 (63.65)	43.33 (83.57)	
2005-06	36.22	19.37	55.59	32.47 (89.65)	19.41 (100.21)	51.88 (93.33)	
2006-07	37.24	8.72	45.96	29.99 (80.53)	3.26 (37.39)	33.25 (72.35)	
2007-08	36.65	17.76	54.41	30.24 (82.51)	3.84 (21.62)	34.08 (62.64)	
2008-09	39.42	22.36	61.78	35.81 (90.84)	6.39 (28.58)	42.20 (68.30)	
Total	183.80	85.79	269.59	160.65	44.09	204.74	

**Table No. 1.2.3** 

Source: Appropriation Accounts

Figures in bracket indicate percentage of expenditure with reference to budget.

During the years 2004-09, there were savings in both 'Revenue' and 'Capital' Account. Persistent savings in Capital account ranged between 36 and 78 *per cent* 

(except in 2005-06) mostly due to non-release of funds by the State Finance Department for the projects approved under ACA and NLCPR as discussed in the succeeding paragraphs.

Supplementary provisions mainly for payment of stipend, scholarship, training and construction works were made even though the actual expenditure did not exceed the original provisions (except in 2005-06 and 2007-08 on Capital Account).

# **1.2.8.3 Expenditure Control Register**

Based on the Budget allocation, funds were allocated to the respective Drawing and Disbursing Officers (DDOs) on quarterly basis. A prudent financial management requires that the subsequent releases are based on the actual utilisation of funds. Although monthly expenditure reports were received from the Drawing and Disbursing Officers, Control Register (Sub-Head wise) for each DDO was not maintained at the Directorate to watch the flow of expenditure resulting in lack of control over the overall as well as unit-wise expenditure which in turn left the budgeting process totally unmonitored.

# **1.2.8.4 Maintenance of Cash Book**

In violation of the provisions of Treasury Rules, in all the 13 units test-checked, neither the monthly physical verification of cash nor the prescribed quarterly surprise check of cash balance was conducted while in 12 out of them (except KNM College, Sonamura) the entries in the Cash Book were not duly attested by the DDOs. None of the units had also carried out regular monthly reconciliation with the Treasury/Bank during 2004-09.

Non-adherence to the prescribed financial rules and procedures weakened the overall financial management in the Department and also made the system vulnerable to malpractices. The Government in the exit conference (September 2009) assured to enforce strict compliance with the extant rules.

# **1.2.9 Project implementation**

# **1.2.9.1** Setting up of Colleges

In order to have at least one General Degree College in each Sub-Division, the Perspective Plan (2008-13) envisaged setting up of 6 new General Degree Colleges (4 during 2008-10 and 2 during 2010-13). As of September 2009, no new college was set up. The Government stated in the exit conference (September 2009) that setting up of 6 new degree colleges and 3 polytechnic institutions are in the pipeline.

# **1.2.9.2 Infrastructure Development**

During the years 2004-09, 11 projects under Additional Central Assistance (ACA) for Rs.58.90 crore and four projects under Non-Lapsable Central Pool of Resources (NLCPR) for Rs.47.58 crore were sanctioned by the GOI for undertaking new construction works as well as for strengthening the existing infrastructure of the institutions of Education (Higher) Department in the State.

The Finance Department did not release Rs.10.79 crore (24 *per cent*) against the funds of Rs.45.82 crore released by GOI under ACA and Rs.9.25 crore (54 *per cent*) against the fund of Rs.17.18 crore released by GOI under NLCPR till June 2009. Further, utilisation certificates for only Rs.11.23 crore and Rs.3.18 crore out of Rs.45.82 crore and Rs.17.18 crore respectively had been submitted by the State Government under ACA and NLCPR as of June 2009.

Test-check of records revealed that:

(i) Rupees five crore released by the Finance Department in October 2007 for construction of Academic wing of Bir Bikram Memorial College, Agartala was not transferred to the construction Agency (THCB<sup>4</sup>) by the Directorate. Instead, the amount (Rs. 5 crore) was invested in term deposit at State Co-operative Bank and the interest earned (Rs. 35.44 lakh) was deposited in Government account in May 2009.



Site for Academic Wing of Bir Bikram Memorial College

The funds were transferred to the THCB in two spells, in July 2008 (Rs.50 lakh) and March 2009 (Rs.4.50 crore), out of which, an amount of Rs. 75 lakh (15 *per cent*) was spent by THCB as of June 2009 resulting in delay of 21 months as of June 2009 since receipt of the funds. The college was yet to be completed (September 2009) as portrayed in the photograph above.

(ii) During July 2005 to August 2008 Rs.5.25 crore of NLCPR funds were placed with Bhavan's Tripura College authority (a private college) for construction of a College of Science and Technology. The entire funds were placed with the private college without specifying any terms and conditions. In view of allegations of mismanagement of the funds, the Government constituted a committee (February 2009) of State PWD Engineers to conduct physical inspection without specifying any time frame for reporting. Till date (June 2009) the physical inspection report has not been received by the Department. Besides, Rs.3.53 crore has been reported to have been spent up to March 2008 and utilisation certificates for Rs.3.18 crore have been

<sup>&</sup>lt;sup>4</sup> Tripura Housing and Construction Board.

submitted to MoDONER by the State in March 2008. The incomplete building as of September 2009 can be seen in the photograph below:



View of the incomplete building of Bhavan's Tripura College

(iii) For development of infrastructure in Tripura Engineering College (now NIT) Rs.12.24 crore was approved under NLCPR and Rs.2.68 crore was released (December 2006) by the GOI. The project is scheduled to be completed by 2010. The entire amount was released by the State Government to the College authority who in turn placed Rs.2.28 crore with the THCB in 2006-07. The THCB took up the work and sought (January 2008) additional amount of Rs.6.22 crore being the total value of work (Rs.8.50 crore) taken up as of January 2008. No further development on physical progress of work or transfer of funds could be made available to audit as of June 2009. Though the project was taken up in 2006-07, the Department could not furnish to audit the present status of the work. In the meantime, the institution has been converted into a National Institute of Technology.

The Department did not maintain any record of major and minor works with projectwise details of Implementing Agency, date of commencement, scheduled date of completion and other terms and conditions governing the execution of work, present status of work and expected date of completion. No mechanism exists to monitor the physical and financial progress of the funds received for various infrastructure projects. The relevant copies of the project proposals, cost estimates, copies of agreements with the executing agency could not be produced to audit even on specific requisitions followed by reminder.

The Government in the exit conference (September 2009) stated that though documentation was not done properly, capital works are monitored regularly and that a monitoring cell has been set up in the Directorate recently.

## 1.2.9.3 Hostel Building of Belonia Degree College

Construction of a 100 bedded boys hostel building attached to Degree College, Belonia was completed (January 2006) at a cost of rupees one crore and handed over to the college in February 2006. As of June 2009, the building remained unutilised although furniture and utensils were procured for rupees nine lakh and two cook-cummasalchis were posted in January 2009. Thus, the 1,724 students (Enrolment year 2007-08), belonging to interior areas were denied the facility of a hostel. Out of 1,724 students enrolled during 2007-08, 522 students belong to SC/ST community.

In the exit conference (September 2009), the Government attributed the delay to the posting of the required staff to run the hostel as the main reason. It was informed that some posts had been recently created and the hostel was likely to start soon.

## 1.2.9.4 Government Music College, Agartala

Scrutiny revealed that due to acute shortage of key personnel like Astt. Professor (6), Instructor (17) and Accompanist (9), adequate practical classes were not conducted during 2004-09.

According to Tripura University norm, 504 practical classes were to be conducted every year. The college authority could not furnish the actual number of classes conducted during 2004-09, despite specific requisition from audit.

The number of practical classes actually conducted during 2004-08 was worked out by audit from the available attendance registers as shown in the table below:

Category of	No. of practical classes conducted during								
Classes	2004	2005	2006	2007	2008				
1 <sup>st</sup> year	Attendance	53	33	Attendance	Attendance Register				
(Classical,	Register not			Register not	not available				
Vocal)	available			available					
2 <sup>nd</sup> year	-do-	6	Attendance	24	33				
(Classical,			Register not						
Vocal)			available						
3 <sup>rd</sup> year	-do-	Attendance	8	11	89				
(Classical,		Register not							
Vocal)		available							

Table No. 1.2.4

Source: Attendance Registers of Tripura Government Music College.

The Government stated in the exit conference (September 2009) that due to nonavailability of National Eligibility Test (NET)/State Level Eligibility Test (SLET) qualified candidates in the State, efforts to fill up the vacant posts of Asstt. Professors in UGC scale through Tripura Public Service Commission (TPSC) could not materialise.

# **1.2.9.5** Maintenance of the State Archives

The State Archives (inaugurated in January 2000) is responsible for preserving the physical integrity and security of original files and records of the State to facilitate their use by researchers/information seekers. The State Archive is managed by an Archivist with the assistance of one Upper Division Clerk, one Lower Division Clerk and one Group D staff (all of them were deployed on deputation), besides three casual workers.

A critical element of an Archive is a conservation unit for scientific storage and proper up-keep of the records. As of June 2009, the State Archive, temporarily housed in Bir Bikram Memorial College, Agartala does not have any such unit. The Department had neither appointed a Chemist nor provided the requisite chemicals and equipment to the unit. Besides, the post of an Assistant Archivist remained vacant since its creation in June 2003. Thus, valuable records in the State Archives were not scientifically maintained thereby exposing them to the risk of damage.

The Department is also yet to computerise all the archived documents for making them available on website for use of researchers/information seekers, despite the decision to this effect in the 42<sup>nd</sup> meeting of National Committee of Archivists (NCA) held at Dehradun in June 2006. Scrutiny revealed that the Government had been apprised of the need to improve the state of affairs since October 2004. However, no concrete action has been taken till date (June 2009).

# **1.2.10 Public Libraries**

In the network of public libraries in the State, consisting of 24 public libraries functioning at District and Panchayat levels, Bir Chandra State Central Library (BCSCL) is the controlling Library. As the Department has not yet evolved any norms for assessing the requirement of staff for each category of library, the availability of staff vis-à-vis the actual requirement for proper functioning of the public libraries in the State could not be verified in audit.

Scrutiny, however, revealed that there was a shortage of 26 Librarians (67 *per cent*), 57 Library Assistants (81 *per cent*) and 73 Sorters (80 *per cent*) with reference to sanctioned posts of 39, 70 and 91 respectively. Library-wise break up of sanctioned strength has not been worked out by the Department. Thirteen out of the 24 public libraries did not have a Librarian, 15 did not have an Asstt. Librarian and 13 libraries did not have a Sorter. Two out of the 24 libraries did not have any personnel.

In the absence of category-wise requirement of key library personnel against each library, the actual shortfall could not be quantified. However, two libraries were operated without any key library personnel. The Government in the exit conference stated (September 2009) that the gap in the librarians had already been addressed by recruitment of 24 librarians and as for sorters, the revision of Recruitment Rules was being contemplated.

# **1.2.10.1 Purchase of Library Books**

During the period 2004-09, 1.54 lakh books were purchased at a cost of Rs.1.64 crore under Raja Ram Mohan Roy Library Foundation (RRRLF) Fund and 0.32 lakh books at a cost of Rs.13 lakh under Eleventh Finance Commission Grant.

It was seen that entering details of stock of 1.86 lakh (1.54 + 0.32) books in the Central Stock Register of Bir Chandra State Central Library (BCSCL) and their subsequent distribution to all other sister libraries of the State were executed by

engaging daily rated workers while, other essential technical work (i.e. classification, cataloguing etc.) were done by regular Library employees.

Scrutiny revealed that no record of the completion of classification and cataloguing required to be performed by each field libraries were maintained. Despite audit request, the Bir Chandra State Central Library authority was not in a position to state the total number of books fully classified, catalogued and ready for issue to readers during 2004-09.

#### **1.2.11 Human Resources**

There was no evidence of scientific assessment of manpower in the Department. Records of the Department indicated that as of May 2009, there was an overall shortage of 807 staff (sanctioned strength: 2,211; Men-in-position: 1,404) in 45 categories, of which, 328 were teaching posts.

It was noticed that while the Annual Action Plans (2007-10) for development of Higher Education in Tripura had projected recruitment of 646 staff<sup>5</sup> during the planned period, 301 staff<sup>6</sup> (47 *per cent*) were recruited as of June 2009.

The Government in the exit conference (September 2009), attributed the shortage of the required manpower in General and in Music College and also in the State Archives to the non-availability of eligible candidates. It was stated that attempts were made to fill up the vacancies by conducting interviews in New Delhi and Kolkata recently. Besides, necessary revision in the Recruitment Rules was stated to be in progress to enable filling up of the vacancies.

## 1.2.11.1 Teacher-Student ratio

The University Grants Commission (UGC) has prescribed a norm of 1:20 for teacherstudent ratio in General Colleges. As of September 2008, the total number of students enrolled in 15 Government Colleges imparting general courses in Science, Commerce and Arts curriculum at graduation level was 25,960 (1<sup>st</sup> year: 12,950; 2<sup>nd</sup> year: 8,553; 3<sup>rd</sup> year: 4,457). The number of teachers in position was only 415 (against the sanctioned strength of 661) indicating a teacher-student ratio of 1:63 in the State. The Department stated (May 2009) that it had started the process of filling up 246 vacant posts.

## 1.2.12 Post Matric Scholarship

During 2004-09, the SC/ST and OBC Welfare Departments placed Rs. 6.19 crore under the Post Matric Scholarship Scheme (CSS) with the DHE, for providing financial assistance to the SC, ST and OBC students studying in Tripura University and outside the State. Out of these funds, Rs.43 lakh was surrendered by DHE after allocating Rs.5.76 crore to different institutions for disbursement. As per the records

<sup>&</sup>lt;sup>5</sup> Asstt. Professor: 360; Lecturer: 33; PTCT: 89; Non-teaching technical staff: 19; Laboratory Assistant: 52; Other Group 'C' Staff: 93.

<sup>&</sup>lt;sup>6</sup> Asstt. Professor: 163; Lecturer: 13; PTCT: 25; Non-teaching technical staff: 15; Laboratory Assistant: 52; Other Group 'C' Staff: 33.

of DHE, 6,536 students (3,220 SC & OBC and 3,316 ST) benefited during 2004-09 under the scheme as shown below:

Table 1.0. 1.2.5									
Year	Fu	nd released by		No. of students benefited under the					
	(	Rs. in lakh)		scheme					
	SC & OBC	ST W	Total fund	SC & OBC	ST W	Total			
	Department	Department	available	Department	Department				
2004-05	94.86	6.67	101.53	686	362	1,048			
2005-06	88.56	27.92	116.48	539	832	1,371			
2006-07	97.00	15.07	112.07	512	627	1,139			
2007-08	76.01	28.79	104.80	581	712	1,293			
2008-09	156.79	27.00	183.79	902	783	1,685			
Total	513.22	105.45	618.67	3220	3316	6,536			

**Table No. 1.2.5** 

Source: Departmental Figures.

The Department did not maintain any consolidated record of total number of eligible SC, OBC and ST students studying in Tripura University and outside the State. Neither the Education (Higher) Department nor the SC&OBC Welfare and ST Welfare Departments maintain a database of the students eligible for scholarship. In the absence of such a database, the quantum of funds required could not be ascertained. As a result, there were persistent surrenders during 2004-09. Scrutiny of records disclosed that as of June 2009, an amount of Rs. five lakh (Rs.0.71 lakh pertaining to the period 2000-04) being undisbursed stipend amount was lying in the cash of the Director of Higher Education. In November 2007, the Tripura University refunded undisbursed stipend amount of Rs.5.47 lakh (pertaining to the period from April 2002 to May 2007) to DHE. The SC & OBC and ST Welfare Departments has been placing the funds with the Education Department every year without ascertaining the actual number of eligible students. Besides, no reconciliation takes place between the sanctioning and disbursing authorities. Hence, the veracity of the disbursements claimed by the Department could not be vouched in audit.

## 1.2.12.1 North Eastern Council Fund

Under the scheme of financial support to the students of North Eastern Region for Higher Education in Courses like MBBS, BDS, B-Tech, B.E, B.Sc-Agri etc., an amount of Rs.1.80 crore was released by the North Eastern Council during the years 2004-09 and the entire amount was utilised by the DHE for extending benefit to students ranging from 207 to 945 during that period as detailed below:

Year	Fund released	Fund utilised	No. of students benefited under the scheme in				
	by NEC	by DHE	Diploma	Degree	PG	Total	
	(Rs. in lakh)	(Rs. in lakh)			level		
2004-05	15.00	15.00	20	174	13	207	
2005-06	31.50	31.50	29	312	29	370	
2006-07	22.50	22.50	17	189	16	222	
2007-08	35.49	35.49	7	327	60	394	
2008-09	76.00	76.00	124	752	69	945	
Total	180.49	180.49	197	1,754	187	2,138	

**Table No. 1.2.6** 

Source: Departmental records

In the absence of any consolidated data with year-wise status of each student eligible to benefit under the scheme, audit could not ascertain whether stipend was provided to all the eligible students on regular basis.

In the exit conference (September 2009), the Government stated that irregular fund flow from NEC had hindered the normal distribution of stipend on a regular and sustainable basis.

# **1.2.13** Technical Education under Public Private Partnership (PPP)

Keeping in view the resources required for development of infrastructure and posting of requisite number of qualified teachers for various disciplines, private universities were encouraged for meeting the emerging demands in higher education in the State. Presently, logistic support has been accorded to the Institute of Chartered Financial Analysts of India (ICFAI) University which has started functioning in the State and providing education in Management, Engineering, B.Ed, Teachers' Training etc. Another Institution, *viz* Bhavan's Tripura College of Science and Technology was provided with land and one time grant for its establishment and it has started providing courses in Computer Science, Management etc.

Audit revealed that no laid down PPP policy on education exists in the State despite it being envisaged in the Perspective Plan. PPPs were considered on case to case basis and the Department could not furnish detailed terms and conditions for funding the projects undertaken under PPP Scheme. In spite of audit requisition, the copies of MOUs could not be made available. On an audit query to specify the terms and conditions as well as details of logistic support extended to ICFAI, the Department called for the relevant information from ICFAI in July 2009, the reply of which is awaited.

The Government in the exit conference (September 2009) informed that only statutory permission was being considered at present and it is yet to finalise the modalities and terms of reference of PPP.

# **1.2.14 Training of Teachers**

## **1.2.14.1 Mid-career training**

According to UGC Guidelines, participation in orientation/refresher courses, each of at least three to four weeks duration, and consistently satisfactory performance appraisal reports shall be the mandatory requirement for Career Advancement from Lecturer to Lecturer (Senior Scale) and from Lecturer (Senior Scale) to Lecturer (Selection Grade).

The senior teachers like Readers/Lecturers (Selection Grade) and Professors may opt to attend two seminars/conferences in their subject area and present papers in order to qualify for promotion/selection to higher level or attend refresher courses to be offered by Academic Staff Colleges (ASCs) for this level.

The total number of teachers actually benefited under the scheme of Career Advancement during 2004-09 and also those who had undergone Orientation/Refresher courses could not be ascertained. The Department stated that no consolidated record was maintained at the Directorate.

However, in the exit conference (September 2009) the Government stated that for promoting the faculty members in different disciplines, the Departmental Promotion Committee (DPC) ensures adherence to the prescribed UGC norms while recommending promotions.

In the absence of consolidated record in the Department as discussed above, the claim of the Government could not be confirmed by audit.

# 1.2.15. Monitoring and Internal Audit

#### **1.2.15.1 Monitoring framework**

The Directorate had no centralised database on various activities that were undertaken for implementation. State level review meetings were held regularly but the follow up action taken in accordance with decision of the meetings were not documented. The effectiveness of the review meeting, therefore, remained un-assessed. As a result, monitoring at the Chief Controlling Officer level was not evident. However, in June 2009 a monitoring cell has been constituted in the Directorate of Higher Education to review and monitor the progress of construction works undertaken by the Department.

### 1.2.15.2 Internal audit

Internal Audit has not been established within the Department. The Directorate of Local Audit (DLA) (set up in May 2002) under the Finance Department conducts internal audit of all the State Government offices. During 2004-09, the DLA carried out audit of 11 units (2006-07: 4, 2007-08: 5, 2008-09: 2) in the Department. Of the 11 units, 64 out of 95 observations issued were awaiting settlement as of June 2009. Lack of response from the auditee was found to be the main reason for the audit paragraphs not being settled.

#### **1.2.16 Conclusion**

The Department planned its activities and formulated its budgets without obtaining any inputs from the educational institutions. The allocation of funds for higher education as a percentage of Social Services gradually declined over the years. Acute shortage of teaching staff, non-maintenance of teacher-student ratio as prescribed by UGC and absence of an effective monitoring mechanism impacted the functioning of the Department in ensuring quality education to students.

# **1.2.17 Recommendations**

- The Department should obtain inputs from the educational institutions before planning its activities and formulating its budget.
- The Department should take effective action for recruitment of teaching staff in line with UGC norms, to ensure quality education.
- An effective monitoring mechanism should be introduced.
- A well defined PPP policy should be formulated keeping in view the overall interest of the State. Documentation on PPP projects should be transparent and widely publicised to ensure accountability and public scrutiny.

# **REVENUE DEPARTMENT**

#### **1.3 Information technology review of e-Suvidha – an e-Governance** project

The e-Suvidha project was initiated to facilitate provision of citizen centric services through a single window. There was however, no action plan for the implementation of the project and none of the SDM offices selected for audit was providing all the envisaged services to the citizens despite the lapse of over nine years since the project was initiated.

In the absence of action plan and defined roadmaps, the project remained incomplete even after nine years of its launch.

(Paragraphs 1.3.6 and 1.3.7.1)

Procurement of Biometric finger print sensor keyboards, provision for which does not exist in the application, resulted in infructuous expenditure of Rs. 2.30 lakh.

(Paragraph 1.3.7.3)

**Rs. 54.32** lakh incurred on procurement of Touch Screen Kiosks and V-SATs remained idle for more than 5 years.

(Paragraph 1.3.7.4)

Citizens were denied the benefits of archiving due to non-utilisation of the module, which would have facilitated issue of subsequent certificates without resubmission of required documents.

(Paragraph 1.3.7.5)

Due to lack of validation controls, the system accepts same input data more than once.

(Paragraph 1.3.8.1)

## **1.3.1 Introduction**

The Government of Tripura initiated an e-Governance project e-Suvidha (Service Facilitation Centre) during 2000 with a view to harness the benefits of Information Technology (IT) for effective and transparent functioning of administration. The project envisaged to provide a single window facility to citizen for providing 23<sup>1</sup> varied certificates like PRTC<sup>1</sup>, Income, Survival, SC, ST, and OBC Certificates etc.

To overcome the problems of the manual system, like a citizen requiring several inquiries/visits to ascertain the status of application during the process of verification, validation, decision, rejection etc. e-Suvidha envisaged citizen to submit their requests

<sup>&</sup>lt;sup>1</sup> PRTC, Income, ST, SC, OBC (State), Survival, Land Valuation, Living children, OBC(Central), Citizenship, Registration of Birth, Registration of Death, Distance Certificate, Renewable License for Cable Operators, Indo-Bangladesh Passport, Certified copy of By-Birth Citizenship, SC, ST and OBD(State), By-Form Citizenship, Registration of Death, Distance Certificate and Survival certificate. <sup>1</sup> Permanent Resident of Tripura Certificate.

for services at a single location and monitor their status over designated kiosk or through internet.

The project was initially implemented (July 2000) in the Sub-Divisional Magistrate (SDM) office at Udaipur. Subsequently, Government decided (March 2004) to extend the project to all Sub-Divisions by opening Service Facilitation Centres (SFCs) at all SDM offices of the State. There were 16<sup>2</sup> SFCs at 16 (out of 17) SDM offices of the State and Rs. 1.93 crore have been incurred for implementation of the project.

e-Suvidha is a Client Server system implemented over a LAN, comprising of VB 6.0 as front-end tool with Crystal Report 7 and SQL Server 2000 as back-end database engine on Windows 2003 platform developed by National Informatics Centre (NIC). The hardware were procured and installed by NIC through National Informatics Centre Services (NICSI). District Information Officers (DIOs) of NIC posted in district headquarters are providing technical support.

## **1.3.2** Objectives of the project

The main objectives of e-Suvidha project were to:

- provide various services to citizens at a single location
- provide facility to the citizen for viewing their application status over kiosk or internet
- monitor the efficiency of the subordinates in performing their duties and responsibilities for delivering these services
- bring transparency in the process of providing services
- reduce time and harassment of the citizen.

#### **1.3.3 Organisational Set-up**

Revenue Department headed by a Principal Secretary through the SDMs is the implementing department. The IT Department of the State and NIC are associated for providing technical support. Existing staff of SDM offices were utilised for implementation of the project and operation of the system.

#### **1.3.4** Scope and Methodology of Audit

The scope of audit included test-check of the records of the Director of IT Department, Revenue Department,  $10^3$  (out of 17) SDM offices (selected by using random sampling) and verification of the general and application controls of the

<sup>&</sup>lt;sup>2</sup> Agartala, Bishalgarh, Sonamura, Khowai, Teliamura, Udaipur, Amarpur, Belonia, Sabroom, Dharmanagar, Kailashahar, Kanchanpur, Ambassa, LT Valley, Kamalpur and Gandacherra, (Santirbazar has not yet implemented).

<sup>&</sup>lt;sup>3</sup> Amarpur, Ambassa, Belonia, Bishalgarh, Dharmanagar, Kailashahar, Sabroom, Sadar, Santirbazar and Teliamura.

system. Out of 10 selected SDMs, database of 8 SDMs<sup>4</sup> were available for analytical check of data completeness, regularity and consistency, using an audit software tool namely IDEA (Interactive Data Extraction and Analysis). Records relating to expenditure for implementation of e-Suvidha were examined.

# **1.3.5 Audit Objectives**

The audit objectives were to ascertain whether:

- Objectives of project (i.e. increase transparency and efficiency, improve delivery of services to the citizen etc.) were achieved
- Physical and logical access controls were adequate
- Database is complete, secured and reliable
- IT Security and business continuity plan were in place
- Procurement, supply, installation and maintenance of hardware were effective
- Personnel management and training policy were adequate.

# **Audit Findings**

# **1.3.6** Absence of strategic plan

No action plan was drawn up for implementation of the project. Roadmap with predefined targets with designated agencies for implementation of the various aspects of the project was not prepared.

In the absence of defined responsibilities, at initial stage itself Rs. 21.00 lakh for site preparation at 14 SDM offices allocated to NICSI during March 2004 was returned through NIC, Agartala centre to the concerned DM & Collectors in June 2004.

Thereafter, the SDMs were provided (July 2004) the funds to execute the work of site preparation. Scrutiny of seven selected SDMs, showed that site preparation took a period of 9 to 27 months. Thus, non-involvement of the SDMs at the initial level planning attributed to the delay in site preparation of the project.

# **1.3.7** System implementation

# **1.3.7.1 Delay in completion of project**

Scrutiny of 8 selected SDMs revealed that in none of the SDMs offices the system was providing all 23 services to the citizen even after lapse of nine years of implementation. In SDM, Udaipur where the project was initially implemented, e-Suvidha was being used for issue of eight certificates only. Services provided through e-Suvidha by various SDMs ranged from 3 to 8 in place of 23.

<sup>&</sup>lt;sup>4</sup> Out of 10 SDM offices selected for audit, only 8 databases could be downloaded. In SDM, Santirbazar the system has not been implemented and in SDM, Kailashahar database could not be downloaded due to system fault.

Thus, only a maximum of eight types of certificates were being issued through e-Suvidha and other certificates were still issued manually. In the absence of any definite target, the likely date for completion of the project is not known.

### **1.3.7.2** Delay in providing services to the citizen

As per guidelines issued by the Revenue Department, the application for Permanent Resident Certificate should be disposed off within a maximum period of one month from the date of receipt of the application.

Scrutiny of the database of 8 selected SDMs revealed that 5,593 cases of PRC were lying pending for a period ranging from 2 to 52 months. Further, although the system had provision for generating delay reports, in none of the 8 SDMs, review of the delay reports by higher authority was noticed.

#### **1.3.7.3.** Infructuous expenditure of Rs.2.30 lakh due to nonutilisation of Biometric finger print sensor keyboards

15 Biometric finger print sensor keyboards costing Rs. 2,29,695 were supplied by NICSI to 15 SDMs<sup>5</sup> during March 2005, for use at e-Suvidha centres. However, the same were not installed in any of the 9 SFCs audited. The Biometric finger print sensor keyboards were lying unutilised for more than four years. As no module/menu exists in the application for use of Biometric finger print sensor keyboard, its further utility is not assured and the expenditure of Rs. 2.30 lakh has become infructuous.

# 1.3.7.4 Non-utilisation of Touch Screen Kiosks and V-SAT resulting in idle expenditure of Rs. 54.32 lakh

To provide facility to the citizen for viewing their application status over kiosk/internet, 14 Touch Screen Kiosks and 14 V-SATs were provided to 14 SDM offices. The expenditure incurred (March 2004) including Card for HUB at NIC, Delhi was Rs. 54.32 lakh. In 9 out of 16 SDM offices audited, Kiosks were installed during November 2004 to March 2005, but the records of the installation of V-SATs were not made available to audit.

It was noticed that initial data entries of applications received were fed into the system but data entry of the status of subsequent stages were not done immediately on completion of each process.

Hence, due to non-updation of the data of the status of application at each step of its process, the system did not fulfill the objective of providing facility to the citizen for viewing the status of their applications over kiosk or internet thereby rendering the expenditure of Rs.54.32 lakh idle and the objective of reducing the inconvenience caused to citizen in visiting Government offices several times remained unachieved.

<sup>&</sup>lt;sup>5</sup> Sadar, Bishalgarh, Sonamura, Khowai, Udaipur, Amarpur, Belonia, Sabroom, Dharmanagar, Kailashahar, Kanchanpur, Ambassa, Kamalpur, Gandacherra and LT Valley.

## **1.3.7.5** Non-archiving of the service request dockets

One of the main features of the project is to archive the Service Request 'Docket' (supporting documents on the basis of which certificates are issued to citizen) after providing services to the citizen. Once archived, the same documents would not be required to be resubmitted for subsequent requests for obtaining any other certificates.

Scrutiny of eight selected SDMs revealed that archiving of Service Request Dockets were not done in any of the SDM offices though the facility was provided in the application. The citizens were, therefore, required to resubmit their documents during subsequent applications. Thus, the benefits of electronic archiving facility available in the system were not utilised.

# **1.3.8 Deficiency in Application Software**

# **1.3.8.1** Lack of validation control – system accepts same data more than once

Scrutiny of the application and database revealed that no validation check was provided in the application software for rejecting same data for same certificate. The system accepts same person's request more than once for the same certificate. Details of same records entered more than once in the database of 8 selected SDM offices are illustrated as below:

SI.	Name of Sub-	PRC SC ST		OBC (State)					
No.	Division	No. of	No. of	No. of	No. of	No. of	No. of	No. of	No. of
		cases	times	cases	times	cases	times	cases	times
1.	SDM, Ambassa	151	2-5	10	2	17	2-4	15	2-3
2	SDM, Amarpur	206	2-6	8	2-4			7	2-4
3	SDM, Belonia	559	2-11	16	2-3				
4	SDM, Bishalgarh	363	2-8						
5	SDM,Dharmanagar	1,619	2-12	47	2-3	27	2-3	22	2-4
6	SDM, Sabroom	274	2-6						
7	SDM, Teliamura	132	2-7						
8	SDM, Sadar	1,523	2-10	187	2-5	114	2-6	204	2-6
	TOTAL:	4,827		268		158		248	
Note: Applicant's name, father's name, date of birth and service id have been taken into									

**Table No. 1.3.1** 

Note: Applicant's name, father's name, date of birth and service id have been taken into consideration for finding duplicate records during preparation of this statement.

**Source:** Database of the SDMs.

The above table depicts that due to absence of proper validation checks at data entry level, system accepts same person's request more than once which led to database being inflated with duplicate data, resulting in an inaccurate database.

# **1.3.8.2** Inadequate provision for collection of fees from citizens

Fees for issue of Permanent Resident Certificate are Rs. 2/- and Rs. 5/- for BPL and APL card holders respectively. Scrutiny of the application revealed that there was no provision for capturing fees collected at different rates from the applicants. As such, the records of the collection of fees are being maintained manually. Moreover, the system has no provision for capturing data to categorise BPL and APL applicants.

Thus, fees of Rs. 5, 87,751 collected as on 31 March 2009 for issue of PRC in  $5^6$  audited SDM offices could not be reconciled with the database.

### **1.3.9** Absence of IT Security and business continuity plan

#### **1.3.9.1** Lack of segregation of duties

The Application provides three level users with following distinct roles:

- (i) **Data entry operator**: File request of the applicant, issue acknowledgement, take print out of certificate or memo.
- (ii) **Section:** Online validation (i.e to click either satisfactory or doubtful) with reference to the supporting documents submitted by the applicant.
- (iii) **Decision taking authority:** Accord online decision to either issue certificate or reject the request.

In all the 9 SDMs reviewed, it was found that there was no segregation of duties in respect of the personnel working in the e-Suvidha centres. Data entry operators (DEOs) ranging from one to six were found to perform all the above roles and responsibilities. In all the 9 SDMs, the DEOs were operating all the three modules using three separate user-IDs and passwords. Lack of segregation of duties therefore made the system vulnerable to unauthorised access of the database.

## **1.3.9.2** Lack of business continuity Plan

There was no documented business continuity and disaster recovery plan defining the roles and responsibilities for continuing the operations of e-Suvidha in the event of any disaster caused either due to intentional, accidental or natural calamities. Database backup were not stored in CDs/Tapes for being stored offsite. However, database backups were kept in standby servers in 4<sup>7</sup> out of 9 SDM offices reviewed. Further, no testing procedure to check the backup data by restoration at periodical intervals has been adopted in any of the audited SDM offices.

## **1.3.10 Inadequate documentation**

Only the user manual, system installation manual and software resource specification (SRS) were prepared by NIC. The Department has no documentation on other aspects like troubleshooting, system management, hardware maintenance, disaster management policy, security policy, training policy etc. Lack of documentation affected the smooth and efficient operation of the application. The downtime recorded in 7 out of 16 SDM offices are given in table No. 1.3.2.

<sup>&</sup>lt;sup>6</sup> Amarpur, Sadar, Kailashahar, Teliamura and Udaipur.

<sup>&</sup>lt;sup>7</sup> Dharmanagar, Kailashahar, Sadar and Teliamura.

Sl.	Name of Office	Down time					
No.		No. ofMax. no. of daysoccurrenceshalted in oneoccurrenceoccurrence		Reasons			
1.	SDM, Amarpur	10 to 12	30 days	Hardware problems			
2.	SDM, Ambassa	2	2 days	Hardware problems			
3.	SDM, Dharmanagar	10 to 15	15 days	Hardware problems			
4.	SDM, Kailashahar	10 to 15	15 days	Hardware problems			
5.	SDM, Sabroom	15 to 20	5 days	Hardware problems			
6.	SDM, Sadar	10-15	1 days	Hardware problems			
7.	SDM, Teliamura	2	5 days	Virus problems			

**Table No. 1.3.2** 

The above table depicts that system was halted several times ranging from 1 to 30 days mainly on account of hardware problems.

# **1.3.11** Other points of interest

# **1.3.11.1** No budget provision for maintenance of the project

No budget provisions were made to meet the recurring expenditure for its maintenance and consumables. The Government instructed (February 2005) all SDMs that recurring expenditure pertaining to Service Facilitation Centre was to be borne by the respective SDM offices. However, no budget provision has been made for its maintenance till date (May 2009).

In the absence of budget provision, the AMC period of all the computers including servers expired on 1 March 2008 but no further AMC was executed due to scarcity of funds. Consequently, most of the Computers, Printers, Scanners, Kiosks including additional Servers provided for standby and backup purpose were out of order.

# 1.3.11.2 Unspent money of Rs. 30.43 lakh lying with NICSI

Director of IT (DIT) Department, in March 2004 made an advance payment of Rs. 1,92,36,800 to NICSI for procurement, supply and installation of V-SATs, Servers, other hardwares & software, networking items, UPS and other peripherals for implementation of e-Suvidha system at 14 SDM offices. Scrutiny of the records of NIC, DIT and SDM offices revealed that balance amount of Rs. 30,42,518 (i.e. after deducting Rs. 1,38,87,988 as cost of material supplied and Rs. 23,06,294 as refunded by NICSI) was still lying unadjusted/refunded to the DIT till date (May 2009).

# **1.3.11.3** Non-maintenance of Inventory

As per provision of GFR a reliable list, inventory or account of all stores in the custody shall be maintained in a form prescribed by the government to enable ready verification of stores and check of accounts at any time, and transactions shall be recorded in it as they occur. Scrutiny of records revealed that none of the 9 selected SDMs maintained Inventory Registers.

The Draft Review was issued to the Government on 2 July 2009. An exit conference was held on 20 August 2009, where the audit findings were accepted and an assurance

was given to look into the deficiencies as brought out in the review to furnish the detailed replies.

# 1.3.12 Conclusion

Government launched e-Suvidha, a project to enhance the services provided to the citizens by availing benefits of IT, where it envisaged to provide a large number of services to the citizens through a single window. The project, however, suffered from lack of defined targets and uncertainty of its completion. Besides, due to improper use of application, the objective of citizens viewing the status of their applications over kiosks or internet remained unimplemented. The system is merely being utilised for data storage, typing and printing the certificates even after 9 years of its launch.

# **1.3.13 Recommendations**

- Formulate a plan and draw targets with clearly defined responsibilities for proper utilisation of the hardwares, applications and completion of the project.
- Review the application software to ensure accuracy of the data and proper accountal of revenue.
- Provide maintenance of the hardwares and ensure early restoration of the system through guaranteed services.
- Provide periodic training to the personnel deployed for the project.