CHAPTER-I: PERFORMANCE REVIEWS

EDUCATION DEPARTMENT

1.1 ELEMENTARY EDUCATION PROGRAMME

Education is one of the most important indicators of social progress of a nation. Both the State and GOI have been spending enormous funds on increasing enrolment, retention and providing quality education at the elementary level. To achieve this, the Government of India (GOI) introduced the Right of Children to Free and Compulsory Education (RTE) Act 2009 from 1st April 2010. The RTE Act had not been extended to J&K State as the 42nd constitutional amendment had not been adopted by the State. The education system in the State is governed by the Jammu and Kashmir School Education Act 2002 which contains provisions similar to the RTE Act. To achieve the goal of education for all, the GOI introduced two flagship programmes viz. Sarva Shiksha Abhiyan (SSA) and Mid-day Meal (MDM) scheme to support the State in creating, developing and strengthening the Elementary School System and increasing enrolment, retention and creation of necessary infrastructure for the school going children. Audit observed poor utilization of funds under the programmes resulting in huge unspent balances at the close of the financial years at all the levels. The department had failed to provide basic amenities and facilities to students.

Highlights

- ***The Department had not prepared any perspective plan. Annual plans prepared were not based on inputs from school/Zonal level or Household Surveys. NGO's were not involved at any level.***

(Paragraphs: 1.1.7)

- ***State Implementing Society (SIS) of SSA had retained funds and parked it in Saving Bank Accounts during 2006-11. 32 to 72 per cent of funds were released by SIS to implementing agencies at the fag end of financial years.***

(Paragraph: 1.1.10.2)

- ***At the State level 3256 habitations (12 per cent) were without any schooling facility. Though Teacher Pupil ratio in test-checked schools was 1:12 and within the prescribed norm of 1:40, 718 schools out of 7016 schools in test-checked districts were run by single teachers.***

(Paragraphs: 1.1.11.1 and 1.1.11.4)

- ***Out of 5232 works relating to construction of schools, additional class rooms cluster resource centres etc. taken up during 2002-11, only 65 per cent had been***

completed. Work on 560 school buildings had not been started. 485 works had been abandoned mid-way and work on 34 school buildings in test-checked districts had been taken up on disputed sites.

(Paragraph: 1.1.12)

- ***There was a lack of basic amenities and facilities such as toilets, drinking water, play grounds, etc., in many schools.***

(Paragraph: 1.1.12.3)

- ***488 computer systems earmarked for 97 CAL Centres purchased during 2006-09 in six test-checked districts were lying idle due to which computer facilities could not be extended to 184 of the 193 surveyed schools.***

(Paragraph: 1.1.12.6)

- ***Delay of more than three to five months in issue of text books to students was observed.***

(Paragraph: 1.1.14)

- ***Non-completion of 68 KGBV school-cum-hostel buildings for the last three years had resulted not only in unproductive expenditure of ₹9.24 crore but also avoidable annual rentals of ₹27.20 lakh on hired accommodation.***

(Paragraph: 1.1.16.1)

- ***Introduction of Mid-day-meals programme did not have the desired impact due to inadequate infrastructure, deficient survey for preparation of Annual plans and less lifting food grains from Food Corporation of India***

(Paragraph: 1.1.18)

- ***Monitoring of the programme was virtually non-existent.***

(Paragraph: 1.1.22)

1.1.1 Introduction

The National System of Education envisages a common education structure and, at the elementary level, it comprises five years of Primary and three years of Upper Primary Education. Indian Constitution (Article 45 A) directs that Governments should provide free and compulsory education to all the children within age group of 6 to 14. The 93rd Constitutional Amendment envisages that Primary Education shall be a “fundamental right”. The right of children to free and compulsory education (RTE) Act 2009 also came into effect from 1st April 2010. To achieve the goals of universal access, enrollment and retention and achieve improvement in quality of education by providing useful and relevant elementary education to all children in the age group of 6-14 years, the Government of India (GOI) introduced flagship programmes to support the states in creating, developing and strengthening formal primary and upper primary school systems by laying emphasis on:

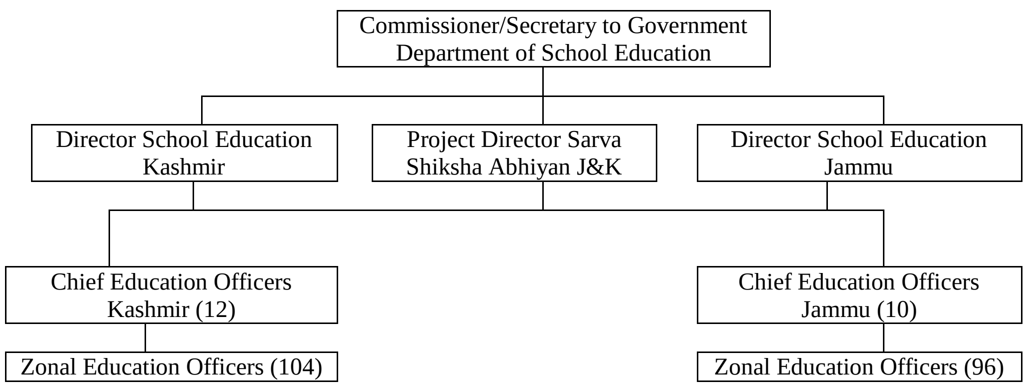
- Universal access and enrolment, i.e making education accessible to all children up to 14 years;
- Universal retention, i.e., making sure that the children continue education; and
- Improvement in the quality of education to enable children to achieve essential competence levels of learning.

The RTE Act had not been extended to J&K State as the 42nd constitutional amendment, listing 'Education' on the concurrent list, had not been adopted by the State. The Education system in the State is governed by the Jammu and Kashmir School Education Act 2002 containing provisions similar to the RTE Act.

1.1.2 Administrative Set-up

The organizational set-up for implementation of the schemes/programmes is as under:

Chart-I



1.1.3 Scope of Audit

The performance audit of Elementary Education Programme was conducted, between May and July 2011 covering the period from 2006-07 to 2010-11, by test-check of the records of Administrative Department (Commissioner Secretary, Education Department), Director School Education, Kashmir and Jammu; six out of 22 Chief Education Officers, 34[1] out of 200 Zonal Education Officers, four out of 22 District Institute of Education & Trainings and 193 out of 21,579 Primary/Upper primary (PS/UPS) schools, selected on random sampling basis. The expenditure of ₹ 1931.41 crore representing 31 *per cent* of the total expenditure of ₹ 6186.94 crore was test-checked during the review.

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[1] Test checked CEO's:- Kupwara, Pulwama, Srinagar, Rajouri, Kathua and Doda.
Test checked ZEO's:- Rajouri-10, Kathua-6, Doda-4, Srinagar-2, Kupwara,-7, Pulwama-5.
Test checked DIET's:- Rajouri, Doda, Basohli and Kupwara.

1.1.4 Audit Objectives

The performance audit was conducted to assess whether:-

a) annual planning process for various schemes/flagship programmes were adequate and effective;

b) financial management was effective and efficient and funds provided were utilized properly;

c) implementation of various schemes/programmes was efficient and economical;

d) schemes/programmes achieved its principal objective of universalization of Elementary Education through improved enrollment and retention and reduced dropout rate; and

e) adequate monitoring mechanism existed for evaluating the outcome of the flagship programmes.

1.1.5 Audit Criteria

Audit findings were benchmarked against the following criteria:-

01 Annual Works Plans and Budget (AWP&B)/Annual Action Plans

02 Guidelines for the schemes/flagship programmes being implemented by the Department

03 Financial Rules of the State Government

04 Prescribed monitoring mechanism

05 Quality assurance norms of food in respect of mid-day meals scheme

1.1.6 Audit Methodology

An entry conference was held on 13.06.2011 with Principal Secretary to Government, Department of School Education and other functionaries wherein objectives, scope and audit criteria were discussed. Exit Conferences were held in November 2011 with the Directors School Education Jammu/Srinagar wherein major audit findings were discussed by the Deputy Accountant General (I-C). The Directors assured that corrective steps would be taken for better implementation of the programmes. The replies of the Department have been suitably incorporated in the review at appropriate places.

1.1.7 Planning

Planning is the basic element in execution of a scheme/project/programme for bringing out the desired results in a time-bound framework. It forms the core of an implementation process and ensures that a programme addresses need-based issues in an economical, efficient and timely manner. For this, the State is to formulate an action plan, keeping in view the resources, for both the long and short-term goals. A long-term plan should encompass a State Level plan formulated from District Level plans based on habitation level plans. The district and habitation level plans, having focus on deficiencies at the ground level are to be prepared by core teams constituted at district and block level with adequate representation from Education Department/District Institute of Education and Training/Cluster Resource Centers/Block Resource Centers/NGOs, etc.

It was seen that:

- The State had not prepared any long-term Perspective Plan for addressing deficiencies in the Elementary Education sector.
- Annual Plans were prepared at the district level by the Chief Education Officers (CEOs) as per the directions of the State Planning Department for Plan funding of that particular year. These district plans were discussed in the District Development Board (DDB) meetings in consultation with elected public representatives before approval. The Plans formulated were not, however, based on inputs from Schools/Blocks/Zones as no data on baseline household surveys, gap analysis, research studies, etc. were received from Schools/ZEO's. The Plans had been prepared adopting a top down approach instead of bottom up approach and did not reveal true and realistic basis for fund allocation.
- The annual plans were found deficient on following counts:-
    - Key areas of backwardness in Elementary Education level and steps taken for their redressel and development were not considered.
    - There was no roadmap in the plans to bridge the gap in development of elementary education with prioritization and clear time-frame for achieving the objectives at each level.
    - The role of NGO's associated with Elementary Education for implementation of various programmes had not been considered.

The Director Education, Jammu while admitting (May 2011) that only annual district plans were being formulated, that too for Plan fund purposes, assured that the deficiencies would be taken into account while formulating the plans in future.

1.1.8 Financial Management

Funds are allocated through the State Budget for carrying out various developmental activities. In addition, funds are released directly to the implementing agencies for educational developmental programmes sponsored by the GOI and the State Government. The source/pattern of funding and the purpose for implementation of various Schemes in the State under the Sector are elaborated in the following table.

Table 1.1.1

Source	*Funding pattern*		*Purposes/Intervention*
	GOI Share	*State share*	
State Sector	Nil	Full	Direction and Administration
Sarva Shiksha Abhiyan	2006-07: 75 2007-08: 65 2008-09: 65 2009-10: 60 2010-11: 65	25 35 35 40 35	Salary, Innovative activities like Bridge courses, school maintenance grants, school grants, TLE, Civil works, seasonal centres, etc.
Mid-Day-Meal	75 (100% in respect of food grains and transportation costs)	25	Food grains, cooking cost, kitchen-sheds, utensils, transportation etc.

Funding under State Sector

The position of funds received under State Sector (excluding State Share of GOI assisted schemes) and expenditure incurred thereagainst was as under:-

Table 1.1.2

(₹in crore)

Year	*Plan*		*Non-Plan*		*Total*	
	Allocation	*Expenditure*	*Allocation*	*Expenditure*	*Allocation*	*Expenditure*
2006-07	220.87	187.34	378.44	362.25	599.31	549.59
2007-08	234.14	185.00	438.80	413.70	672.94	598.70
2008-09	160.66	137.69	611.72	545.48	772.38	683.17
2009-10	410.57	364.29	764.06	707.95	1174.63	1072.24
2010-11	184.87	173.79	971.48	854.83	1156.35	1028.62
Total	***1211.11***	***1048.11***	***3164.50***	***2884.21***	***4375.61***	***3932.32***

Source: Records of the Directors School Education

The State funding has largely been for direction and administration and comprised 92 *per cent* Revenue and 08 *per cent* Capital expenditure during 2006-11. The savings ranged between eight and 11 *per cent* and analysis revealed these savings were mostly recorded under components like land acquisitions, subsidy/incentives, purchase of books, on-going works, etc. Hence, the Sector had to rely on funding under Centrally Sponsored Schemes for expansion and infrastructural development.

1.1.9 Programme Implementation

Since the State funding over the years had been insufficient to improve the education system, the GOI schemes are targeted at filling the gaps in infrastructure in a time-bound manner so as to achieve the goal of 'Education for all' within a specified time period.

- The SSA promises to change the face of Elementary Education and provide useful and quality education to all children in the age group of 6-14 years by 2010 besides extending support to States in creating, developing and strengthening primary and upper primary school system. The SSA is an effort to improve the performance of the school system and provide community-owned quality education in a mission mode besides bridging gender and social disparities in elementary education with special focus on educational needs of girls, SC/ST children with disabilities and disadvantaged children.

- The National Programme of Nutritional Support to primary education commonly known as Mid-Day Meal (MDM) scheme was launched by the GOI in the State on 1st September 2004 with the objective of boosting primary education by increasing enrolment, retention and attendance in Government schools and Education Guarantee Scheme (EGS) centres.

While the SSA envisages providing full infrastructural facilities to the school-going children, the MDM was introduced with the dual purpose of providing nutritional support apart from alluring children to attend schools. As the activities under the two programmes are distinctly different, the achievements under the two programmes since introduction of the schemes, as observed by Audit, have been dealt with separately in the succeeding paragraphs.

1.1.10 Sarva Shiksha Abhiyan

1.1.10.1 Planning

As per the SSA guidelines, five-year perspective plan (PP) and annual plans are required to be prepared for implementation of the programme. An annual plan proposes the interventions for a year and is to flow from PP. However, it was noticed that PP had not been formulated; as a result, long-term strategies with a vision to accomplish the goals through phasing of funds and activities of the programme had been ignored.

It was noticed that:

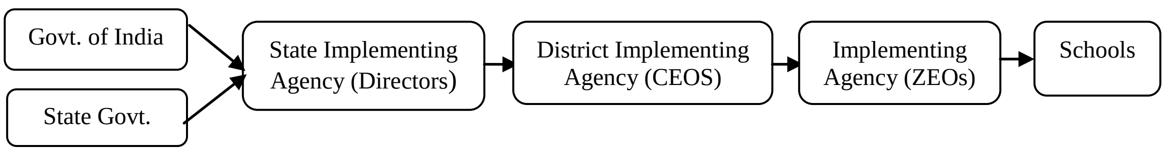
- The annual plans during 2006-11 were formulated at the district level without consulting the stakeholders (Zonal/Village Education Committees/School Management Committees levels) and the district authorities had not conducted any research or survey on the baseline indicators like enrolment, retention and out-of-school children. There were, thus, no clear benchmarks on various social indicators and the reality at the grassroots level was not actually reflected in the annual plans. The documentation process for preparation of plans to evidence the fact that they had been prepared at the habitation level through participatory planning mode was not on record.

- The main sources of data required for planning and plan formulations are household surveys, the District Information System for Education (DISE) data and research studies. It was seen that planning teams had neither been constituted at the habitation level nor the Block/Zonal Level indicating absence of community participation. In the absence of household surveys and research studies, the authenticity of the data of all children up to the age of 14 years – enrolled or never enrolled, out of school and children to be enrolled in EGS/alternative/PS Schools, etc. could not be ascertained. Funds provided for these surveys in two (Rajouri and Kathua) out of six test-checked districts had been lying unspent as of March 2011, indicating that the CEOs had not taken any steps to have a formal survey carried out despite availability of funds. No funds had been provided for household surveys from 2006-07 onwards by the State Project Director (SPD) to other districts. The CEOs attributed non-utilisation of funds to non-performing of this activity since 2006-07.

1.1.10.2 Financial Management

To achieve the intended objectives of the Programme, the GOI/State Government releases funds (Centre/State Share) in favour of the State Implementing Society (SIS) for further release to the District Implementing Society (CEOs) for implementation of the Programme for onward transmission to the Zonal Education Officers (ZEOs).

Funds Flow Chart



Funds for Teaching Learning Equipment (TLE), Teacher Learning Material (TLM) and school Maintenance Grants (SMG) are credited by the ZEOs to the joint Bank accounts of School Education Committees and Village education Committees.

The year-wise details of allotments made by the GOI/State to the SIS and their further distribution to the district implementing units during 2006-11 were as under:

Table 1.1.3

(₹in crore)

Year	*Opening balance*	*G.O. India releases*	*State Govt. releases*	*Other receipts*	*Total*	*Releases*	*Closing balance*
2006-07	45.88	220.83	59.89	0.83	327.43	316.27	11.16
2007-08	11.16	200.63	74.21	4.32	290.32	270.58	19.74
2008-09	19.74	205.32	69.00	4.49	298.55	268.13	30.42
2009-10	30.42	373.63	180.51	7.47	592.03	548.70	43.33
2010-11	43.33	403.49	539.14	33.24	1019.20	640.01	379.19
Total		***1403.90***	***922.75***	***50.35***	***2377.00***	***2043.69***	

The SIS had retained huge balances ranging between ₹ 11 crore and ₹ 379 crore during 2006-11 indicating that funds had not been released to the CEOs in full. It was also seen that release of funds by the CEOs to the ZEOs was not in synchronization with the pace of implementation of the programme at the ground level, thus, resulting in parking of huge funds in Saving Bank accounts at all levels (CEOs/ZEOs/Schools). As a result, the balances with the six test-checked CEOs also increased from ₹ 29 crore ending March 2006 to ₹ 85.16 crore at the close of March 2011 as detailed in the table.

Table 1.1.4

(₹ in crore)

Districts	*O.B as on 01-04-2006*	*Closing Balance as on 31-03-2011*	*Percentage of unspent yearly balances*
Rajouri	9.93	28.00	**40 to 66%**
Doda	0.45	19.36	**25 to 60%**
Kathua	5.72	12.85	**22 to 63%**
Kupwara	5.28	3.28	**5 to 24%**
Pulwama	5.61	10.34	**39 to 47%**
Srinagar	2.01	11.33	**43 to 57%**
Total	***29***	***85.16***	

It was also seen in 34 test-checked zones that funds had been released routinely by the CEOs without having regard to the actual requirements which had contributed to accumulation of unspent bank balances of ₹ 58.85 crore with the ZEOs.

On being pointed out, it was intimated that the funds were released without having been requisitioned. Reasons for release of funds without being requisitioned were not intimated.

1.1.10.3 Short Releases by GOI/State Government

As per financial manual of SSA, the GOI is to release funds to the SIS in April and September every year and the participating State is to release its share within 30 days of the receipt of central contribution. Shortfall in releases of funds by both the GOI and the State Government against the approved annual action (AAP) plans, observed during 2006-11, are tabulated below:

Table 1.1.5

(₹ in crore)

Year	*Annual Plan*	*GOI share*	*Actual GOI releases*	*Shortfall by GOI*	*State Share*	*Actual State releases*	*Shortfall in releases by the State*
2006-07	354.54	265.90	220.83	45.07	88.64	59.89	**28.75**
2007-08	321.52	208.98	200.63	8.35	112.53	74.21	**38.32**
2008-09	499.45	324.64	205.33	119.32	174.81	69.00	**105.81**
2009-10	761.09	456.66	373.63	83.03	304.44	180.51	**123.93**
2010-11	1066.00	692.90	403.49	289.41	373.10	539.14	**(-) 166.04**

There was shortfall ranging between ₹ 8.35 crore and ₹ 289.41 crore in releases by the GOI against the AAP outlay during 2006-11. The State had short-released the matching share between ₹ 28.75 crore and ₹ 123.93 crore during the period. The aggregate shortfall of ₹ 297 crore had, however, been compensated by the State to the extent of ₹ 166.04 crore during 2010-11.

Following further significant points were noticed in audit.

- Financial rules stipulate that releases and expenditure should be evenly distributed throughout the financial year. Contrary to this, 32 to 72 *per cent* of the funds had been released by the SPD to the CEOs at the fag end of the financial year during 2006-11.

- Test-check in six districts revealed delays, in the release of funds by the CEOs to the implementing agencies (ZEOs), ranging between 24 and 354 days during 2006-11. The CEO's attributed late release of funds to non-receipt of utilization certificates and allied documents from the ZEO's. This was indicative of weak controls over the flow of funds.

- At the State level, against the release of ₹ 2044 crore by the State Project Director (SPD) to the CEOs during 2006-11, ₹ 1002 crore (49 *per cent*) only had been certified by the Chartered Accountants and utilization certificates (UCs) to that extent only had been submitted to the GOI/State Government, indicating that huge unspent balances were lying unutilized with the implementing units. Moreover, UCs pertaining to the period had not been submitted by the ZEOs to the CEOs which had resulted in non-submission of UCs by the CEOs to the SPD. The CEOs stated (August 2011) that the receipt and issue of UCs would be watched in future.

- As per SSA manual for Financial Management and Procurement (2004), funds released by SPD, CEOs and ZEOs are to be initially classified as Advances in the books and subsequently adjusted on receipt of expenditure statements/UCs in proof of the amount having been spent. Advances not actually spent are to be shown as outstanding advances and not as expenditure.

  Contrary to the above, the SPD, CEOs and ZEOs had booked the advances paid as expenditure without first booking them as advances in the advance payment registers, which had not been maintained. The District Implementing Societies had released ₹ 634.24 crore to ZEOs for various interventions for which no utilization/expenditure statements had been obtained and these advances had remained unadjusted. 34 test-checked ZEOs too had advanced ₹ 12.89 crore to various schools as grants, teacher grant, maintenance of school buildings grant, for teacher learning equipment etc. for 2006-11 but the expenditure statements/UCs thereagainst were awaited.

- Expenditure incurred on items of work not provided in the programmes is construed as diversion which is irregular as it affects other activities of the programme. Test-check of records in DIET, CEO Rajouri and 10[2] ZEOs revealed that ₹ 39.79 lakh had been spent during 2006-11 irregularly on items like stationery, POL, hiring of vehicles, telephone charges, repairs of office equipment, carriage, Teacher's Day celebrations, vehicle hiring/vehicle repair and

[2] Kupwara, Drugmula, Rajwar, Mawar, Kralpora, Pulwama, Loorigam, Awantipora, Rajouri and Sunderbani

fabrication etc., not covered under any interventions of the scheme. In Kashmir province, such expenditure was incurred out of interest earned on SSA funds which as per guidelines were to be refunded to SPD. On being pointed out (July 2011), the Principal DIET, CEO Rajouri and ZEO's Kupwara/Pulwama intimated that instructions had been noted and such diversion would be avoided in future.

Also, Financial Manual (SSA) prohibits diversion of funds from one activity to another. In contravention thereto, the CEO, Kupwara had diverted ₹ 34.39 lakh from one activity of the SSA to another irregularly without any approval from the grant sanctioning authority. On this being pointed out, it was stated that due to non-availability of funds for a particular intervention, the loan was taken from other interventions which would be recouped. The reply was not acceptable as the action taken by the CEOs was not in accordance with the dictates of the Financial Manual of the SSA.

- Test-check of records for the period 2006-11 in two CEOs and four ZEOs revealed that money sanctioned for approved interventions had not been utilised and were lying idle as detailed in the table:-

Table 1.1.6

(₹ in lakh)

District/Zone	*Activity*	*Amount*
Chief Education Officer, Doda	Innovative activities, TLE for EGS upgraded	1.49 3.80
Chief Education Officer, Rajouri	House hold survey Text book supply Electric facilities Remedial teaching	1.95 1.73 11.50 5.35
Zonal Education Officer, Bani	Household survey, salary of third teacher, rent of building	1.72
Zonal Education Officer, Balesa	Ramps, electric charges, ECCE, BRC/CRC buildings	2.30
Zonal Education Officer, Bhaderwah	Construction of ramps, BRC/CRC furniture ECCE	1.83
Zonal Education Officer, Doda	Salary of third teacher, ECCE and construction of ramps	0.96
Total		***32.63***

Source: Departmental Statements.

On being pointed out, the CEOs intimated that interventions could not be taken up due to non-formulation of action plans, non-conduct of household survey, most of the targeted students having left the schools, and funds having been received in excess of requirements.

- Cash books of SPD revealed that control issues like working out of monthly cash balances, attestation of individual entries/cutting and working out annual closing cash balances had not been taken care of while writing the cash books. Apart from this, reconciliation of releases/closing balances with those of the CEOs had not been carried out. Variation between SPD releases and CEOs receipts and between CEOs releases and ZEOs receipts were noticed in Rajouri district. Similarly, neither had the intra-department reconciliation been conducted in any of the test-checked CEOs/ZEOs nor the monthly bank reconciliation carried out at the District/zonal/school levels. In the absence of these control mechanism, chances of misappropriation etc. could not be ruled out.

On this being pointed out, the SPD/CEOs/ZEOs intimated that it would be done in future.

- An expenditure of ₹ 1.58 crore booked by the Director School Education, Jammu under 'material and supplies' during 2006-11 could not be test-checked in audit as the details of allocation of ₹ 1.13 crore for 2007-10 made to different CEOs were not available with the Directorate. Besides, ₹ 45 lakh booked during 2010-11 showed that ₹ 6.42 lakh allocated to CEO Rajouri was not shown as having been received by the district office. Also, details of ₹ four lakh under this component spent by CEO Rajouri during 2007-08 were not available in that office. The CEO intimated that the records were not available and would be located.

1.1.11 Status of Major Interventions

1.1.11.1 Access of Children to Schooling

Availability of schooling facility is measured by a set of indicators concerning access. Norms provide that a habitation with a population of 300 and above having no school within a radius of one km is entitled to a Primary School, and an Upper Primary school is to be located at a distance of three kms from a habitation with a population of 500 and above.

Also, EGS and Alternative Innovative Education (AIE) are important components of the programme to bring out-of-school children in the fold of Elementary Education. EGS addresses the inaccessible habitations with no formal school. In exceptional cases, such as remote habitations in hilly area, an EGS can be opened even for 10 children. Alternative education interventions for specific categories of very deprived children e.g. child labourers, street children, migrating children, working children, children living in difficult circumstances and older children in the 9+ age-group, especially adolescent girls, are being supported under EGS and AIE. At the State level, the position of availability of PS/EGS/AIE and UPS at the beginning and end of the review period was as under.

Table 1.1.7

S.No	Particulars	2006-07	2010-11
1	Total habitations	23683	27223
Primary/EGS/AIS			
2	Habitations with PS/EGS within one km	21,702	23969
3	Habitations without PS/EGS within one km	1981	3256
4	Habitations eligible for PS as per State norms	195	498
5	Habitations not eligible for PS but eligible for EGS	244	1346
6	Children affected due to (4) and (5) above	NA	12104
Upper Primary			
7	Habitations having UPS facility in 3 km	NA	24278
8	Habitations without UPS facility in 3 km	NA	2945
9	Eligible school less habitations for UPS as per distance and population	953	863

Source: State Project Director, SSA

At the State level, 3256 habitations (12 *per cent*) were without any schooling facility as of March 2011, indicating that the aim of providing elementary education to all by 2010 was still a distant dream.

The situation was similar in the test-checked districts where out of 8588 habitations, 1298 (15 *per cent*) were without any schooling facilities as of March 2011 as given under:

Table 1.1.8

Particulars	Kupwara	Srinagar	Pulwama	Rajouri	Doda	Kathua	Total
Total habitations	1762	813	965	2076	1474	1498	8588
Habitations without PS/EGS/AIE	136	11	188	196	38	34	603
Habitations without Upper Primary Schools	92	9	122	78	136	163	600

Source: State Project Director, SSA

In order to fill the gap and provide access to/ availability of schools at the elementary level, the department was required to open new primary schools, upgrade EGS centers to primary schools and primary schools to upper primary schools. At the State level it was seen that:

- Against a target of opening of 969 new primary schools under SSA, 863 (89 *per cent*) schools were opened during 2006-11.
- Against a target of up-gradation of 4039 PS to UPS, 3685 (91 per cent) had been upgraded.
- Against the target of conversion of 5876 EGS to PS, 5692 (97 per cent) had been converted during 2006-11.

The details connected therewith are discussed in paragraph under ‘infrastructure’.

1.1.11.2 Enrolment

The position of child population (6-14 year age group), enrollment and out-of-school children for the period 2006-11 at the State level is given hereunder:-

Table 1.1.9

Particulars	*2006-07*	*2007-08*	*2008-09*	*2009-10*	*2010-11*
Child Population	19.54	18.44	19.99	20.19	NA
Enrollment	18.42	17.35	19.15	19.67	NA
Out of school children (*per cent*)	**1.12 (5.73)**	**1.09 (5.91)**	**0.84 (4.20)**	**0.52 (2.58)**	**NA**

Source: Departmental records SSA

Though there had been a gradual decline in the out-of-school children from 5.73 *per cent* in 2006-07 to 2.58 *per cent* in 2009-10, yet the goal of Universal Elementary Education (UEE) was not achieved as of March 2010.

In the test-checked districts, the position as of March 2011 was as under:

Table 1.1.10

Particulars	*Kashmir Province*			*Jammu Province*			
	Kupwara	*Pulwama*	*Srinagar*	*Rajouri*	*Kathua*	*Doda*	*Total*
Child Population	122848	80106	135878	125181	102649	79909	646571
Enrolment	90049	79286	134149	121966	101322	79015	605787
Out of School Children	2335	820	1729	3215	1327	894	10320
Percentage	**2**	**1**	**1**	**3**	**1**	**1**	**1.59**

(Source: Departmental Figures),(Enrolment does not include students admitted in private schools)

As can be seen, 1.59 *per cent* of children in the age group of 6-14 were still out of schools. It was further noticed that attendance and progress of each and every child in the age group of 6-14, enrolled in primary/upper primary schools, were not monitored through the village education committees, retention registers, and pupil progress cards which were not prepared at district/zonal level. The CEOs stated that it would be done in future.

1.1.11.3 Status of Schools and Enrolment

It was seen that despite increase in number of schools, the enrolment had decreased in the test-checked districts as depicted in the following table:

Table 1.1.11

Province	*No of zones*	*Particulars*	*2006-07*	*2010-11*	*Increase (+)/ Decrease (-) per cent*
Kashmir	3	Enrolment	24,795	22,686	(-) 09
		No of schools	329	443	35
Jammu	8	Enrolment	34,894	34,247	(-) 02
		No of schools	624	797	28

Reasons for decrease in enrolment despite increase in the number of schools were attributed to mushrooming of private schools in the districts and preference being given by the parents for enrolling their wards in those schools.

Following table shows the comparative position of number of schools, their enrollment and number of teachers in Government and private schools in six test-checked districts.

Table 1.1.12

School Management	*No. of schools*	*Enrollment (In lakh)*	*No. of teachers*
Government schools	6918	3.55	26,883
Private schools	1505	2.41	15,911

It would be seen that despite the number of Government schools (6,918) being much higher than the number of private schools and also the student teacher ratio being better at 13 in Government schools compared to 15 in private schools, the enrolment in Government schools was only 3.55 lakh (51 students per school) compared to 2.41 lakh (160 students per school) in private schools. This indicated that the people preferred sending their children to private schools despite supply of free text books, providing of mid-day-meals, etc. in Government schools. The department was, thus, not successful in fulfilling the commitment of increasing enrolment in Government schools as envisaged under SSA.

1.1.11.4 Availability of Teachers

As per norms, there should be at least two teachers for every primary school and one teacher for every class in upper primary school. The ratio of one teacher to every 40 students was to be maintained. The position of the number of existing primary and upper primary schools and the number of teachers is given in the table:

Table 1.1.13

Item	*2006-07*	*2007-08*	*2008-09*	*2009-10*	*2010-11*[3]
Primary Schools	13564	11250	14920	14646	6155
Upper Primary Schools	5190	5948	7419	7959	4752
Total	***18754***	***17198***	***22339***	***22605***	***10907***
No. of teachers	68359	70752	76701	83297	41928
Enrollment (in lakh)	15.62	13.14	13.02	12.50	7.21
Ratio of schools with teachers	***1:4***	***1:4***	***1:3***	***1:4***	***1:4***
Pupil -Teacher ratio	***23:1***	***19:1***	***17:1***	***15:1***	***17:1***

Source: Directors School Education

As can be seen both the overall school-teacher ratio and pupil-teacher ratio were well within the prescribed norms.

In the test-checked districts, the position as of March 2011 was as under:

[3] Figures for only Kashmir province as figures for Jammu yet under compilation

Table 1.1.14

Province	*Number of schools*	*Total enrolment*	*Total teachers*	*Teacher Pupil ratio*	*School teacher ratio*
Kashmir	2961	151709	15134	1:10	1:5
Jammu	4055	210447	14936	1:14	1:4
Total	**7016**	**362156**	**30070**	**1:12**	**1:4**

Source: CEOs Offices records

As can be seen, the teacher pupil ratio in the test-checked districts was in the vicinity of 1:12 against the norm of 1:40 with the school teacher ratio of 1:4.

The position of teacher deployment in the schools visited by Audit is given in the following table.

Table 1.1.15

S. No	*Particulars*	*Rajouri*	*Kathua*	*Doda*	*Kupwara*	*Pulwama*	*Srinagar*
1.	No. of Schools visited	36	59	28	37	25	8
2.	Range of Teachers	1 to 13	1 to10	1 to 17	2 to 8	2 to 16	2 to 9
3.	Range of students	15 to 204	4 to 244	11 to 180	22 to 120	18 to 157	23 to 109

Source: CEOs Offices records

It was seen that:

- 718 out of 7016 primary/upper primary schools were being run by a single teacher which was against the SSA norms indicating under-deployment of teachers.
- Five teachers had been deployed in four schools of Pampore Zone (Pulwama district) with zero enrolment for the last one year to three years which had resulted in payment of idle wages of ₹ 15.26 lakh to these teachers during 2008-11 indicating irregular deployment of teachers. Department intimated that steps are afoot for utilizing the services and assets of these defunct schools.

However, during personal visit to schools it was seen that teachers were not engaged in fair and rational numbers as demonstrated below.

Table 1.1.16

District	Upper Primary			District	Primary		
	Name of the school	No. of teachers	No. of students		Name of the school	No. of teachers	No. of students
Doda	MS Doda	16	180	Doda	GPS Haveli	8	17
	MS Changa	6	170		GPS Chinote	5	11
	GMS Mandir	12	116				
	MS Gangal	1	33				
	MS Mohalla	9	89				
	GMS Assise	6	33				
Rajouri	MS sunderbani Mogla	6	204	Rajouri	PS Seripur Behrote	1	33
	MS Rajouri	13	153		GPS Gambir Brahmana	3	16
	MSJaglanoo	8	140				
	MS Kakora	10	84				
	MS Birthpur	8	34				
	MS Balibawan	6	39				
Kathua	GMS Chak Desa Singh	8	244	Kathua	GPS Kangrial	3	29
	MS Chapper	7	19		GPS Palahi	2	11
	GMS Mora Dalian	7	32		PS Chakian	1	8
	MS Kori Thial	1	62		PS Darbal	1	21
	MS Bani	10	138		GPS Satoora	3	8
	Ms Thanoon	1	83				
Kupwara	GMS Kralpora	8	120	Kupwara	GPS Malik Mohalla Gorihar	2	22
	GMS Chak Mohalla Kralpora	5	158		GPS Harpora Handwara	2	56
	GMS Wadipora	7	139				
Srinagar	GMPS Dhobighat	2	23	Pulwama	GPS Ratinipora	16	136
	GMS Hazratbak	9	64		GPS Babapora	2	32
	GMS Habak	6	109		GPS Kachnopora	2	18
	GBMS Tabiya Sangrashi	5	41				

On this being pointed out it was stated that rationalization of staff would be done.

1.1.11.5 Academic performance

Interaction of the audit party with the children in two districts (Rajouri, Doda) showed that 35 out of 53 students of Vth primary and 47 out of 53 students of VIIIth standard could not perform elementary addition, subtraction, division and reading of texts indicating inadequate learning levels of children.

1.1.12 Infrastructure

1.1.12.1 School accommodation

Infrastructure is one of the main interventions under SSA. Norms provided that there should be a room for every teacher or for every grade/class whichever is lower in primary and upper primary with the provision that there shall be two class rooms with *varandah* to every primary school with at least two teachers. Records revealed that 2085 (30 *per cent*) schools at elementary level in six test-checked districts were functioning in rented buildings and 946 (13 *per cent*) out of 7016 schools were having single-room accommodation.

The position of infrastructure in test-checked zones is depicted in the following table.

Table 1.1.17

(In Number)

Particulars	*Jammu*	*Kashmir*
No. of Zones	***37***	***29***
Number of schools (Primary/upper primary)	**4055**	**2961**
Without buildings	1055	1030
With only one room	681	265
With two rooms	NA	826
With three rooms	NA	833
More than 3 rooms	NA	767

Source: ZEOs data

As can be seen, huge deficiencies in accommodation existed in the test-checked zones and records revealed that 31 schools in Kupwara District were functioning in tents, while two schools in Srinagar district were functioning in open, indicating non-prioritisation of construction of buildings and the pace of opening of new schools being not in tune with the requirement.

1.1.12.2 Status of constructions

Construction of school buildings/additional classrooms is one of the major interventions under SSA so that adequate accommodation is provided to children.

At the State level, the position relating to construction works sanctioned under SSA since inception of the scheme (2002-03) up to March 2011 was as under:-

Table 1.1.18

Type of Buildings	*Targets*	*Completed*	*In Progress*	*Not taken up*
Primary schools	9725	5269	2717	1739
Middle schools	1119	680	380	59
Additional Class rooms	13242	5467	3458	4320
Cluster Resource Centres	681	546	44	91
Block Resource Centres	119	89	23	07

Source: SPD, SSA records

While 6216 works (25 *per cent*) had not been taken up at all, 6622 works (27 *per cent*) were in progress as of March 2011. Project Director SSA had not analyzed the reasons for not taking up 6216 works for which explanation from the Chief Education Officers had been called for (May 2011). Analysis of the available data by Audit in one of the districts (Rajouri) showed that the broad reasons for shortfall were disputes between community members and school management. Although the Project Director, *Sarva Shiksha Abhiyan* had booked ₹ 314.90 crore on civil works during 2006-10, yet work-wise, component-wise, zone-wise details had not been maintained.

In the test-checked districts, it was noticed that out of ₹ 231.33 crore received during 2006-11 by the CEOs from the SIS for the intervention, only ₹ 201.20 crore had been released to the zones. The retentions had ranged between 30 and 59 *per cent* during the period.

The annual targets and achievements in respect of construction of primary/upper primary schools, additional classrooms and CRC during 2006-11 in the six test-checked districts were as under:

Table 1.1.19

Year	*Targets*				*Achievements*			
	PS	*UPS*	*ACRs*	*CRC*	*PS*	*UPS*	*ACRs*	*CRC*
2006-07	554	100	1198	00	461	86	1063	00
2007-08	742	13	00	41	441	06	00	27
2008-09	653	107	00	00	301	45	00	00
2009-10	153	00	1333	00	26	00	269	00
2010-11	308	00	600	10	00	00	00	00
Total	***2410***	***220***	***3131***	***51***	***1229***	***137***	***1332***	***27***
Shortfall					***51***	***62***	***43***	***53***

Source: SPD, SSA records
(Primary School PS, Upper Primary School UPS, Additional Class Room ACR, Cluster Resource Centre - CRC)

Evidently, a significant number of students had been denied the benefit of infrastructural facilities proposed under SSA with shortfall in achievement of targets ranging between 43 and 62 *per cent* despite there being availability of funds.

Out of 5232 works estimated to cost ₹ 156.83 crore taken up during 2002-11, 3422 works had been completed during the period at a cost of ₹ 105.45 crore.

The status of remaining 35 *per cent* works-in-progress as of March 2011 was as under:

Table 1.1.20

District	**No. of incomplete Works**	**Expenditure incurred**	**Work not started**	**Disputed**	**Present Status**		
					Plinth level	Lintel level	Roof/Finishing Level
Jammu	1434	1338.85	397	34	508	316	179
Kashmir	376	520.42	163	Nil	101	57	55
Total	**1810**	**1859.27**	**560**	**34**	**609**	**373**	**234**

As can be seen 1810 works taken up for execution during 2002-11 had not been completed and work on 560 school buildings had not been started as of March 2011. The work on 34 school buildings was under dispute due to land disputes, forest land and disputes between Village Education Committees and School Committee members and out of remaining 1216 works, 485 works had been abandoned after spending ₹ 807.23 lakh thereon as of March 2011. These works were required to be completed within the target period of three to six months. Abandonment of work had not only resulted in unproductive expenditure of ₹ 807.23 lakh but had also deprived children of the intended benefits. On this being pointed out, it was stated that efforts were afoot to get the works completed.

As per the standing instructions, community participation is to be ensured in creating infrastructural facilities and in no case are the works to be got executed through contractors/mates. Contrary to this, 685 (Expenditure: ₹ 17.55 crore) out of 1239 works had been got executed through contractors without involving School Management

Committees/Village Education Committees. The Department attributed it to non-receipt/absence of programme guidelines upto 2007-08.

1.1.12.3 Basic Amenities and facilities

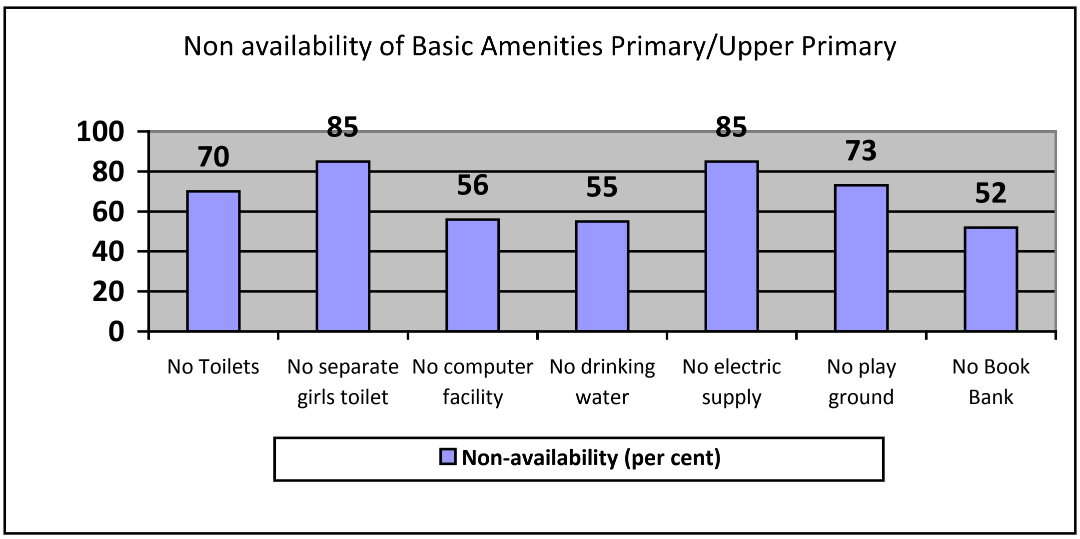
Huge deficiencies in basic minimum amenities at the elementary level were observed in all the six test-checked districts as depicted in the following table.

Table 1.1.21

(In Number)

Amenities	*Jammu*	*Kashmir*	*Total*	*Percentage*
No. of Schools	**4055**	**2961**	**7016**	
No Toilets	2838	2029	4867	**69**
No separate Girls Toilet	3388	2554	5942	**85**
No Computer facility	3936	2046	5982	**85**
No Drinking Water	2108	724	2832	**40**
No Electric Supply	3257	2691	5948	**85**
No Access Ramps for handicapped/disabled children	3579	2435	6014	**86**
No Play Ground	2770	2329	5099	**73**
No Book Bank	2382	1274	3656	**52**
No Furniture for Students	830	2316	3146	**45**

Chart-1.1.2



The huge deficiency in the basic amenities indicated denial of quality education to the children.

1.1.12.4 Infrastructure/amenities at ground level

Quality of education depends, *inter alia*, upon the quality of infrastructure available. One of the basic objectives of the SSA was to enhance the quality of education at elementary school level by providing adequate amenities in the schools. In an on-the-spot visit of various schools in the six test-checked districts following deficiencies were noted.

Table 1.1.22

S. No	*Particulars*	*Rajouri*	*Kathua*	*Doda*	*Kupwara*	*Pulwama*	*Srinagar*
1	**No. of Schools visited**	**36**	**59**	**28**	**37**	**25**	**8**
2	Black Boards not available	2	3	2	Nil	Nil	Nil
3	School Building not in good condition	9	16	6	22	15	02
4	No Play ground	22	21	25	31	18	03
5	No toilets	nil	nil	nil	22	04	Nil
6	No Separate Toilets	24	38	18	33	22	06
7	Seating arrangement						
	Only Mats	32	29	20	30	22	01
	Only Desks	2	9	-	04	03	07
	Mats/Desk	-	21	8	03	Nil	Nil
	Only Gunny Bags	2	-	-	Nil	Nil	Nil
8	No Boundary Wall	29	44	21	33	17	05
9	No Drinking Water Facilities	14	19	20	22	03	Nil
10	No Electricity	34	33	25	34	25	08
11	No Approach Road	26	12	11	16	06	02
12	Without Kitchen cum store shed with utensils	8	14	16	26	19	05
13	No Library/Book Bank	36	59	28	34	23	08
14	No Displaying Boards	36	59	28	30	16	04
15	Decreasing Enrolment	NA	22	16	17	06	05

The amenities were deficient practically in all the categories.

1.1.12.5 Allotment of grants

Under SSA three types of grants are provided for all Government elementary schools. Primary and Upper Primary schools are treated as separate schools even if they are in the same premises.

(i) School grant of ₹ 5000 per annum per primary school and ₹ 7000 per annum per upper primary school is provided to replace school equipment such as blackboard, sitting mats etc. The grant can also be utilized to buy chalk, duster, registers and other office equipment.

(ii) School Maintenance grant is given for maintenance of school building including whitewashing, beautification, repairing of building, boundary wall and playground. Maximum of ₹ 5000 per school per annum is provided if the school has upto three classrooms; maximum of ₹ 10000 per annum if the school has more than three classrooms. The grant is given only for those schools in rural areas which are having their own buildings. The grant is also given to schools in urban areas running from rented buildings. As per SSA norms, the average grant per school for the district should not exceed ₹ 7500.

(iii) Teaching Learning Material grant of ₹ 500 per teacher per annum (these go directly to teachers) is given to all teachers in primary and upper primary schools for buying low cost teaching aids such as charts, posters, models etc.

During the period 2006-11, an amount of ₹ 127.84 crore were released to all districts by Project Director SSA under school grants, school maintenance grants and teacher grants out of which ₹ 44.47 crore were released to six test-checked districts. Audit could verify that the above three grants were not released to schools annually and ₹ 8.98 crore (20 *per cent*) were lying in saving bank accounts as on 31 March 2011. Further, it was seen in two (Doda and Rajouri) of the six test-checked districts that 33 schools (Primary and Upper Primary) had not been paid the admissible annual grants (TLM and SMG). The position of non-receipt of grants by these test-checked schools is tabulated as under:-

Table 1.1.23

Year	*Nil Grant received*	*Only 1 Grant received*	*Only 2 Grants received*	*All 3 grants received*
	(No of schools)			
2006-07	8	4	3	10
2007-08	10	2	6	7
2008-09	7	2	8	8
2009-10	10	7	6	2
2010-11	17	3	4	9

On this being pointed out, the CEOs intimated (August 2011) that the ZEOs had been instructed to pay all admissible grants to schools in future.

1.1.12.6 Idling of Computer systems

Computer Aided Learning (CAL) is an important component under SSA and its real purpose is to make children aware of the use of computers in making content matter of Teaching Learning Process practical and simple. Computer-based learning not only makes learning interesting and joyful, but also induces novelty in thinking approach of the children thereby enhancing their imaginative power.

The Project Director, SSA had purchased 2144 computers with equal number of UPS and 986 printers at a cost of ₹ 7.61 crore during 2006-09 for issue to District Implementing Societies for opening of CAL centers (five computers each) at cluster level out of which only 703 computers/accessories had been supplied to the six test-checked districts.

It was, however, seen in 34 test-checked zones, that 488 computer systems earmarked for 97 CAL centers were lying idle due to non-establishment of the centers as of March 2011. This had not only resulted in blocking of ₹ 1.73 crore for over three years but also defeated the very purpose of procuring the computer systems. Due to this, 184 of the 193 sampled schools could not be provided facilities.

The CEOs attributed non-utilization of computer systems to non-availability of computer trained teachers for running of CAL centers. However, action taken, if any, to get the available manpower trained in the field were not intimated.

1.1.13 Training

The National Policy for Education emphasized the need for a substantial improvement in the quality of education. Engagement of qualified teachers, improvement of performance and skills up-gradation of existing manpower is the most important challenge as the teachers are the principal instrument of education.

The training for teachers in the State is conducted at the State level by the State Institute of Education (SIE) and at the district level by the District Institute of Education and Training (DIET). The training in the sphere of elementary education being imparted by these institutions comprise pre-service and in-service training with special emphasis on content training and refresher courses.

It was, however, seen that:

- SIE had not prepared any periodical appraisal reports on Community Development Blocks, Education Blocks, Block Resource Centers, Cluster Resource Centers in villages/panchayats and no inspection of Primary / Upper Primary Schools had been conducted.
- Test-check of four[4] out of six DIETs revealed that though 15-26 zonal level workshops/camps had been conducted during 2006-11 annually, no research programmes had been conducted. Also, the number of exhibitions/seminars/conferences held was paltry and ranged between one and two annually during the period. In Kupwara, between 15 and 26 camps were held under NEPGEL and Community Mobilization Programmes. This indicated that these activities in these districts were not given priority.
- Data regarding trained/un-trained teachers/masters in Elementary Education Programme had not been maintained at SIE/DIET level which prevented Audit from verifying the availability of trained manpower with the department.
- In the test-checked districts only 14202 (49 *per cent*) of 28893 teachers had been trained.

  The department attributed (June 2011) tardy progress in Programme activities to non-cooperation of the field officers, powers not being vested with DIET for effective and efficient implementation of the programme, and the funds being generally allocated at the fag end of a session.

[4] Rajouri, Doda, Basohli and Kupwara

1.1.14 Supply of Text Books

Text books are supplied free of cost under District Plan to the students of class I and II and under SSA to the enrolled students from Class III to VIII after purchasing the same from Board of School Education (BOSE).

The position of funds provided to the Director School Education (DSE), Jammu/Kashmir by the Project Director, SSA and the expenditure thereagainst during 2006-11 was as under:

Table 1.1.24

(₹ in crore)

Year	Opening Balance	Funds Received	Total	Expenditure	Closing balance
2006-07	0.46	11.79	12.25	11.54	0.71
2007-08	0.71	12.05	12.76	8.41	4.35
2008-09	4.35	18.57	22.92	11.58	11.34
2009-10	11.34	16.75	28.09	16.67	11.42
2010-11	11.42	17.31	28.73	17.70	11.03

It is seen that the opening balance of ₹ 0.46 crore (2006-07) had swelled to ₹ 11.03 crore (March 2011) during the five-year period registering an increase of 2398 *per cent*. It was further learnt that the balances had been parked in the Saving Bank Account by the Directors. The DSE Jammu/Srinagar attributed reasons for accumulation of huge closing balances and short-utilization of funds to despatch of funds by *Sarva Shiksha Abhiyan* without requisition/requirement.

It was also noticed that:

- In 193 sampled schools, incomplete sets of text books had been supplied to the students and that too in the middle of the academic session.
- In two test-checked districts (Pulwama and Srinagar), text books had been procured in excess of actual requirements in 2010-11 resulting in loss of ₹ 11.43 lakh due to change in syllabi.
- The data in the following table depicts the dates of requisitioning the books by the Director Jammu and Kashmir for the academic session from 2007-09 to 2010-11.

Table 1.1.25

Authority	2007-08	2008-09	2009-10	2010-11
Director, Education, Jammu	NA	18-01-2008	26-12-2008	16-11-2009
Director, Education, Kashmir	04-07-2007	03-09-2008	20-04-2009	04-05-2010

Although the requisitions were placed by the Directors with BOSE well in advance, yet month-wise receipt of books had not been monitored statedly (October 2011) on the plea that the books had been lifted by the CEOs/ZEOs directly and no such information was being sent to the Directorates. The verification of the despatches made by BOSE to assess the extent of delay on their part could not be conducted as the relevant records related thereto were not made available to audit.

- The Utilization Certificates/Statement of Expenditure had not been received from BOSE for the above period though called for. Further, reconciliation had not been conducted at any level for the number of books received and payments made with the result Audit could not verify the balances, if any, lying with BOSE. The Director, School Education, Jammu intimated (June 2011) that the CEOs had been directed to conduct reconciliation.

1.1.15 Scholarships

Scholarships are paid to meritorious and economically downtrodden/special category students for boosting the level of education. At the State level the allocation of funds, expenditure booked and physical achievements made against the targets are tabulated as under.

Table 1.1.26

(Students in lakh) *(₹in lakh)*

Year	Physical			Financial		
	Targets	Achievements	Shortfall percentage	Allocation	Expenditure	Short utilization percentage
2007-08	2.55	2.06	19	100.00	80.00	20
2008-09	2.77	2.16	22	96.00	89.58	7
2009-10	2.51	2.09	17	96.00	89.46	7
2010-11	2.48	2.52	Nil	96.00	94.62	1

From the above, it would be seen that shortfall in percentage utilization of funds had ranged between one and 20 while 17 to 22 *per cent* students had not been covered under this programme for the above period. The amount of scholarship each student received during a year on an average works out to less than ₹ 50 during the period 2007-11.

Besides, the sanctions issued for the scholarships had envisaged payments to be made through cheques in the presence of community members (Advisory Board/VEC/Guardians and the concerned teacher) to eligible and rightful students of Gujjar, Bakerwal and Pahari-speaking community from the date of admission during current academic session and no payment was to be made to more than two children with the same parentage, failed and detained students.

Test check of mode and manner of payment in one (Rajouri district) of the test checked district revealed that the acquaintance roll of the scholarship payments had not been attested by disbursing authority in token of having made the payments to the concerned. Instead of payment by cheques in the presence of VEC/Guardian/teachers etc., the payments were shown to have been made to students in cash even to $1^{st}/2^{nd}$ primary students in the absence of VEC/Guardian/Teacher. It was seen that Primary class students had recorded their signature in English; while most of students of 4^{th} / 5^{th} Primary had affixed thumb impressions for having received the payments. Even classes and period for which scholarships had been paid to students had not been recorded on the acquaintance rolls. The payments having been made in these cases were questionable. Test-check further revealed that neither UCs nor a copy of acquaintance had been sent by the ZEOs to the District Officer nor called for.

The CEO intimated (August 2011) that the ZEO's had been requested time and again to furnish UCs and other relevant records but the same had not been sent. This was indicative of the inadequate control mechanism.

1.1.16 Coverage of Special Focus Groups

Under SSA, the girls, SC/ST Children, Children with Special Needs and Early Childhood care have been reckoned as the special focus groups. Incentive by way of providing basic infrastructure for their schooling had been envisaged under SSA and the status thereof is discussed in the succeeding paragraphs.

1.1.16.1 Kasturba Gandhi Balika Vidhyalaya (KGBV)

The scheme launched (August 2004) by the GOI was merged (April 2007) with SSA programme as a separate component for the purpose of setting up residential schools at the Upper Primary Level for girls belonging to the SC/ST/OBC and minorities in difficult areas. Check of the records relating thereto revealed the following.

Construction of schools

Of the 79 KGBV sanctioned for the State[5], 78 were functional. Out of the 78 functional KGBVs 70 were housed in rented accommodation as of March 2011. The Project Director SSA, received ₹ 80.55 crore during 2005-11 for implementation of the programme and undertook construction of 73 school-cum-residential buildings estimated to cost ₹ 24.61 crore between June 2008 and February 2010 without AA/TS. It was seen that the work on five such buildings (estimated cost: ₹ 1.76 crore) had not been taken up for want of sites. After spending ₹ 9.24 crore out of the released funds of ₹ 9.77 crore during 2008-10 on the balance 68 works, further execution was stopped (September 2009) due to withdrawal of execution powers from the Engineering Wing of the society by the higher authorities. No steps had been taken for completion of these works and the unspent balance of ₹ 52.94 lakh continued to lie with the JEs (March 2011). Interestingly, no action had been taken by the department to recover the money from the JEs for depositing the same into the Government account. This had resulted not only in unproductive expenditure of ₹ 9.24 crore for the last two to three years but also payment of avoidable annual rentals of ₹ 27.20 lakh on the rented accommodation.

On being pointed out in audit, the Project Director, SSA stated (February 2011) that the issue of resumption of works had been taken up with the State Government and every effort would be made to complete these works.

[5] Jammu: 34; Kashmir: 45

1.1.16.2 Education for Children with Special Needs (CWSN)

SSA ensures that every child with special needs, irrespective of the kind, category and degree of disability is provided meaningful and quality education. In order to achieve the objective, SSA has made adequate provisions for educating children with special needs in regular schools. Under this intervention, ₹ 1200 per disabled child could be spent annually to meet special learning activity needs of such children viz. early detection and identification of children with special needs, functional and formal assessment, educational placements, aids and appliances, support services, special equipment, reading material, special educational techniques, remedial teaching, training to teachers for such children, resource support by appointment of resource teachers, strategies, removal of architectural barriers in schools, research, monitoring and evaluation.

The position in six test-checked districts regarding enrolment and out-of-school children was as under:-

Table 1.1.27

Year	*Jammu*		*Kashmir*	
	No. of CWSN Identified	*No. of CWSN Enrolled*	*No. of CWSN Identified*	*No. of CWSN Enrolled*
2006-07	3947	2592	7461	5500
2007-08	2940	2339	6845	4157
2008-09	2913	2598	6245	5449
2009-10	3510	2539	6399	5681
2010-11	3709	2471	7198	6234
Total	***17019***	***12539***	***34148***	***27021***

Though huge deficit (23 *per cent*) existed in enrollment of such children, the exact number of children who could have been enrolled in the school could not be commented upon due to non-availability of the data regarding the type of disability the un-enrolled children would be suffering from.

However, it was seen that against the available funds of ₹ 2.62 crore for the programme in six test-checked districts during 2006-11, the expenditure under the intervention was only ₹ 1.03 crore (39 *per cent* only) and the *percentage* of unspent balances during these years ranged between 61 and 97. Shortfall in utilization of funds had not only affected efficient implementation of the programme but also deprived children with special needs of the intended benefits.

The following significant points were also noticed:

- In three sampled schools of a test-checked district where 12 such children had been enrolled, although training had been imparted to the teachers yet their services had not been utilized.
- DIET Kupwara had been entrusted with the responsibility of implementation of the scheme in the district from 2009-10 onwards. Out of ₹ 39.28 lakh received up to 2010-11, only ₹ 2.09 lakh had been spent leaving 95 per cent balances unspent. Reasons for such huge unspent balances were attributed to awaited parent's

consent for correction of deformity surgically in respect of physically handicapped children.

- In three test-checked districts, out of 2961 schools, only 19 *per cent* (577 schools) had been made barrier-free for easy access in order to provide disabled-friendly facilities in schools. The CEO's had failed to provide ramps and other easy approaches to children with special needs despite availability of sufficient funds.
- SSA guidelines provide that all children requiring assistive devices should be provided with aids and appliances as far as possible through convergence with Ministry of Social Justice and Empowerment, State Social Welfare Department, National Institute or NGO's and in case it was not possible to provide it through convergence, these were to be purchased out of the admissible grant of ₹ 1200 earmarked per child per annum. However, it was seen that only 579 (11 *per cent*) out of 5018 such identified children had been provided aids and appliances in three (Srinagar, Kupwara and Pulwama) test-checked districts depriving other children of this facility for which no reasons were on record.

1.1.16.3 Early Childhood Care and Education (ECCE)

The importance of pre-school learning and early childhood care are crucial inputs for improving enrollment and participation of children in formal schooling. Recognizing variety of learning and development, the SSA aims to make all-out efforts to develop an integrated approach to meet the educational needs of pre-schoolers. A provision of up to ₹ 15 lakh per year per district had been made for the purpose under the component 'Innovative Activities'. It provided for strengthening the existing ICDS Centers in the areas of pre-school education by starting such centers in the formal primary school inhabitations not covered under ICDS. The support was to include honoraria for pre-school teachers and extend training to *Aganwari Sevaks*. In order to achieve the objectives, the Project Director, *SSA* released ₹ 3.13 crore to CEO's for ECCE activities. Audit scrutiny of records, however, revealed as under:

- Six test-checked districts had received ₹ 1.41 crore out of which only ₹ 0.31 crore had been spent on organising three workshops and purchase of ECCE kits leaving ₹ 1.10 crore (78 *per cent*) unspent as of March 2011.

  These amounts should have been advanced to Programme Officers, ICDS of the respective districts to identify institutions/groups to strengthen the ECCE component in I.C.D.S. *Anganwari* system. The same had not been done; consequently, ₹ 1.10 crore meant to be spent on this important component of the programme had remained unutilized. In none of the test-checked districts, survey of children in the age group of 0-6 years had been conducted and no plans had been prepared for their educational facilities. The CEOs confirmed that they had not taken any steps to strengthen the pre-school component in ICDS through need-based training of *Aganwari Sevaks*, provision of additional manpower or learning material. No *Balvadis* had been set up in any required area and no programmes had been conducted or training imparted to generate awareness about importance of early child development.

- Under this scheme *Anganwari* Centers were to be upgraded to Nursery Schools through convergence. The Director, Social Welfare, Jammu intimated (July-2011) that Early Childhood Care and Education Programmes launched by the GOI under SSA Special Focus Group had not been implemented in Jammu province till date. A proposal to this effect mooted (February-2009) by the Director and sent to Administrative Department had not been approved as of March 2011.

1.1.16.4 Education of Girl child, SC/ST Children

Education of girl children belonging especially to SC/ST and other disadvantaged groups aims at bringing "out-of-school children" to the school by way of interventions like supply of free text books to targeted girl students, enrolment and retention drives, special course camps and bridge courses, conducting remedial coaching classes and monitoring attendance of girl child. Funds up to ₹ 15 lakh per intervention per year and ₹ 50 lakh in a district in a particular year can be spent on the above interventions.

Test check of records, however, revealed as under:

(i) Although text book were supplied to all students yet there were cases of late supply of two to three months in 193 test-checked schools.

(ii) Enrolment and retention drives through special camps, bridge courses, community mobilization trainings and innovative activities for girls were required to be held under the programme. Out of ₹ 6.58 crore allotted to six test-checked districts, only ₹ 4.04 crore constituting 61 *per cent* of the allotment had been utilized on the activities and the unspent balance of ₹ 2.54 crore had remained parked in the savings bank accounts of the CEOs. In respect of the monies advanced to DRGs/ZRPs/CRCs for holding camps, bridge courses, remedial coaching classes, innovative activities and training courses, it was seen that in none of the cases had the detailed accounts and the details of the programmes/activities been submitted to the district authorities. Also, no advance payment registers had been maintained to watch adjustments there against. The District authorities had not ascertained the impact of the activities undertaken on retention and enrolment of Out of School (OOS) girls in classes on regular basis.

(iii) Data of enrolment of girl student belonging to SC/ST and weaker sections of the society though required had not been maintained and monitoring of attendance of target group had never been done in any of the test-checked districts.

1.1.17 National Programme for Education of Girls at Elementary Level (NPEGEL)

NPEGEL has been formulated for providing education to under-privileged disadvantaged girls from Class 1st to Class 8th as a separate and distinct gender component plan of *SSA.* Under the scheme Primary/Upper Primary Schools were required to be identified as Model Cluster School (MCS) for development / education of girl child.

At the State level the position of MCSs sanctioned/opened, funds allocated and expenditure incurred there-against for 2006-11 was as under:-

Table 1.1.28

(₹ in lakh)

Year	*No. of MCS Sanctioned/Opened*	*Allocation*	*Expenditure*	*Closing Balance*
Upto 2005-06	287	-	-	-
2006-07	15	46.43	44.18	**02.25**
2007-08	261	997.59	962.28	**37.56**
2008-09	Nil	359.36	267.43	**129.49**
2009-10	Nil	359.36	267.43	**221.42**
2010-11	Nil	NA	NA	-
Total	*563*	*1762.74*	*1541.32*	

As can be seen, out of ₹ 17.63 crore released, ₹ 15.41 crore (87 *per cent*) were spent during 2006-10 resulting in accumulation of unspent balance of ₹ 2.22 crore at the end of March 2010. Partial utilization of funds affected proper implementation of NPEGEL Programme. Further, during 2008-10 the spending was only 71 *per cent*. Reasons for not opening MCSs during 2008-11 were attributed to late receipt of funds.

Further, MCS for girls was to be created as a Model Girl Child friendly school at cluster level for a cluster of 5-10 villages. This Girl Child friendly infrastructure which includes facilities in terms of teaching learning equipment, books, learning through computers, film shows, reading material, self-defence, life skills, riding bicycle etc. were to be provided. However, in none of the operational MCSs had the facilities been made available and all functioned as routine schools. The CEOs stated that such facilities would be provided. The reasons for non-provision thereof were not assigned.

1.1.18 National Programme for Education and Nutritional Support (MDM)

The main objective of Mid-Day Meal (MDM) programme besides providing nutritional support was to increase enrollment, retention and attendance of children at Primary/Upper Primary level.

Under Mid Day Meal Scheme, GOI provides the following assistance to State Governments.

(i) Supply of free food grains (wheat/rice) from the nearest FCI go-down @ 100 grams per child per school day for primary classes (I-V) and @ 150 grams per child per school day for upper primary classes (VI-VIII).

(ii) Reimbursement of the actual cost incurred in transportation of food grains from nearest FCI godown to the school subject to the prescribed ceiling.

(iii) Assistance for cooking cost at rates prescribed from time to time.

(iv) Assistance to construct kitchen-cum-store.

(v) Assistance for provisioning and replacement of kitchen devices.

1.1.18.1 Planning

The MDM guidelines assign importance to preparation of Annual Works Plans and Budget (AWP&B) by States based on the information maintained at school level and consolidated in Zones, Districts and at the State level. It also envisages a bottom up approach rather than the top down approach for planning. It is necessary that there is documentation of the process of plan preparation showing number of children already enrolled in schools, number of anticipated children to be enrolled in ensuing year, cost element for providing mid-day meals component-wise and other details at school level through participatory planning process.

It was, however, seen that the documentation process for preparation of AWP&B was deficient. Instead of being prepared at the school level and consolidated at the Zonal level for 2006-11, it had been prepared at District level without any inputs from schools. The Department stated that AWP&B were formulated at the district level on the basis of District Information System for Education (DISE) data. The ZEOs stated that due to political interference the plans were not implemented in accordance with the policy.

1.1.18.2 Financial Management

The details of allocation made and expenditure incurred there-against during the period 2006-11 was as under:

Table 1.1.29

(₹ in crore)

Year	*Allocation*	*Expenditure*	*Un-spent/surrender (Percentage)*
2006-07	11.84	09.93	**16**
2007-08	68.99	29.88	**57**
2008-09	87.36	57.33	**34**
2009-10	62.49	49.36	**21**
2010-11	78.56	65.91	**16**
Total	***309.24***	***212.41***	

The *percentage* of unspent balance ranged between 16 and 57. Reasons therefor were attributed to abnormal conditions prevailing in the valley. It was, however, noticed that though on the one hand the Department had surrendered funds to the extent of savings as depicted in the table above, the Directors School Education (DSE) Kashmir and Jammu, on the other hand, had created liability of ₹ 1.83 crore and ₹ 15.16 crore respectively under MDM as of March 2011.

The DSE, Jammu attributed (August 2011) creation of liability to non-release of 2nd Installment of Central Share by the GOI. However, the DSE, Kashmir did not furnish any reasons for creation of liability.

1.1.18.3 Food Grain Management

The GOI allocates food grains on the basis of district-wise enrollment figures of the eligible schools. It was observed that the state nodal department had not established a system of reliable and authentic data-capture with regard to enrollment figures which would serve as the basis for receipt of food grains. This was borne out by the fact that there was substantial short-lifting of food grains of 15 *per cent* during 2010-11 with reference to lifting of food grains in 2009-10 and to allocations made by the GOI as revealed from the following details: -

Table 1.1.30

(Quantity in MTs.)

Year	Opening balance	Allocation of foodgrains in MTs approved by PAB	Lifting of foodgrains from FCI	Utilization of foodgrains	Closing balance
2006-07	Figures not provided by Administrative Department.				
2007-08	Pry. – 1339.04 Upp. – Nil	16636.37 4622.75	15575.97 864.73	15732.37 777.97	1182.64 86.76
2008-09	Pry. – 1182.64 Upp. 86.76	17388.71 10151.86	11549.16 6017.95	11189.03 5662.20	1542.77 442.51
2009-10	Pry. – 1542.77 Upp. – 442.51	16489.50 9365.02	11706.85 7377.57	11417.90 7169.58	1831.72 650.50
2010-11	Pry. – 1831.72 Upp. 650.50	16500.00 10230.00	9647.01 6643.32	10089.75 6989.01	1388.98 304.81
Total		***101384.21***	***69382.56***	***69027.81***	

It can be seen from the above details, that the State Nodal Agency had lifted 69382.56 MT of food grains during 2007-08 to 2010-11, against the allocation of 101384.21 MT of food grains by GOI which was about 68 *per cent* of the allocation and the quantity actually utilized was less by 355 MTs than what had been lifted which showed that allocations were not made as per requirements. As a result, during the period 2008-11, about 35 *per cent* children studying in primary classes and 33 *per cent* students of upper primary classes were deprived of the benefits of mid-day meal scheme.

As required, the State nodal department had to conduct reconciliation with FCI in order to regulate the claims of actual lifting made by the GOI but no such reconciliation had ever been conducted by the State Nodal Department (March 2011).

Further, it was seen that food grains had been lifted without Joint Inspection by the representatives of FCI and Education Department and without verifying the quality of food grains as required under scheme guidelines.

1.1.18.4 Utilization of funds under "cooking cost"

For getting the meals cooked, the assistance provided by GOI under cooking cost component and the matching share of the State Government during the period 2006-11 is given in the table below.

Table 1.1.31

(₹ in crore)

Period	Primary Class Stage (1 to 5)		Upper Primary Class Stage (6 to 8)	
	Central Assistance	State Share	Central Assistance	State Share
July 2006 to November 2009	1.50	0.50	2.00*	0.50*
December 2009 to March 2010	1.88	0.62	2.81	0.94
April 2010 to March 2011	2.02	0.67	3.02	1.01

**Extended Upper primary Classes w.e.f October 2007*

A test-check of utilization certificates for the period 2007-11 under the component both for Primary and Upper Primary Stage furnished by the State Nodal agency to the GOI showed that against the allocation due based on the figures conveyed by the Programme Approval Board (PAB), the releases made by the GOI was less than the demand. Despite short releases, substantial shortfall in utilization of funds by the State Government ranging from 21 to 41 per cent had occurred during 2007-11 as observed from the following year-wise details:-

Table 1.1.32

(₹ in lakh)

Year	Due allocation as per PAB	Opening balance	Cooking assistance received	Total	Expenditure incurred	Closing Balance
2006-07	Details not available					
2007-08	Pry. – 3929.23 Upp. – 616.37	498.06 -	3431.17 616.37	3929.23 616.37	3414.51 160.74	514.72 455.63
2008-09	Pry. – 3486.54 Upp. – 1270.54	514.72 455.63	3486.54 1270.54	4001.26 1726.17	2443.97 942.92	1557.29 783.25
2009-10	Pry. – 3912.51 Upp. – 1912.08	1557.29 783.25	1708.40 740.19	3265.69 1523.44	2331.81 1084.67	933.88 438.77
2010-11	Pry. – 4420.53 Upp. – 2734.47	933.88 438.77	2292.68 1521.63	3226.56 1960.40	2191.16 1452.35	1035.40 508.05

Based on the enrollment figures furnished by the State Government, ₹ 222.82 crore was required to be released by the GOI / State Government during 2007-11 against which only ₹ 150.68 crore were released to the State Nodal Agency. The department could utilize only 69 *per cent* of the available funds resulting in non-utilization of ₹ 15.43 crore during 2007-11. From the expenditure pattern it could be concluded that the cooked food was not served to all eligible school students on all working days. The shortfall during the period 2008-11 ranged between 50 and 30 *per cent* in primary classes and 43 and 24 *per cent* in upper primary classes. Despite this, the Director School Education Jammu had created liability under this component during 2010-11.This was attributed to the non-release of the second installment of the share by the GOI under the component- an argument that was not acceptable as the department had ample funds to meet such liability under this component of intervention as can be seen from the table.

1.1.19 Infrastructure

Kitchen-cum-store is a vital part of the MDM scheme. Under the scheme, GOI provides assistance upto a maximum of ₹ 60000 for construction of Kitchen-cum-Store. State Governments were expected to pro-actively pursue convergence with other development programmes for this purpose, as allocation under the scheme was not adequate to cover all schools.

Test check of the records revealed inadequate infrastructural facilities for preparation/serving mid-day meals in primary and upper primary schools. Significant aspects noticed are discussed in the subsequent paragraphs.

Kitchen-cum-Store facilities

Absence of kitchen-cum-store or inadequate facilities can expose children to food poisoning and other health hazards as well as fire accidents.

A test-check of records of the Administrative Department revealed that the State nodal agency had allocated the central assistance of ₹ 34.89 crore for construction of 5815 Kitchen sheds during 2006-09 out of which only 4376 units had been constructed at a cost of ₹ 26.25 crore and remaining 1439 units had not taken up as of March 2011. Out of the unspent balance of ₹ 8.63 crore under this component, ₹ 6.27 crore had not been revalidated since 2008-09 and 2009-10 by the GOI.

In the six test-checked districts records showed that 3482 (50 *per cent*) out of 7016 schools were without kitchen-cum-store facilities. In the absence of kitchen-cum-store facilities, the authorities were left with no alternative but to cook/store food articles in classrooms or in the open, thereby hampering the classroom activities. This involved the risk of providing unhygienic food to the inmates.

The availability of kitchen-cum-store sheds during an on-the-spot visit by Audit to schools in six test-checked districts revealed the following position.

Table 1.1.33

S.No	*Particulars*	*Rajouri*	*Kathua*	*Doda*	*Kupwara*	*Pulwama*	*Srinagar*
1	No. of Schools visited	36	59	28	37	25	8
2	Without Kitchen cum store shed with utensils	8	14	16	26	19	05

Kitchen utensil/Kitchen devices

The programme guidelines have a provision for providing and replacing kitchen devices at an average cost of ₹ 5,000 per school. Under the programme, the department has the flexibility to incur expenditure on the items like stoves, *chulhas*, containers for storage of food grains and other ingredients, utensils for cooking and serving on the basis of the actual requirements of the school (provided that the overall average for the State remains ₹ 5000 per school).

It was, however, noticed that there were inadequate kitchen utensils/devices in 81 out of 193 surveyed schools. It was further seen that in some cases the students had been compelled to bring with them their own serving plates.

Excess over estimates

Guidelines of MDM scheme envisage that the GOI would provide assistance to construct kitchen-cum-store in a phased manner with the assistance up to a maximum of ₹ 60,000 per unit. However, in Rajouri district it was seen that for the target of 807 kitchen-cum-store sheds, ₹ 1.88 crore had been received during 2010-11. The District authorities in contravention to the scales fixed by the GOI had constructed only 250 kitchen-sheds with this allotment thereby utilizing ₹ 38.33 lakh in excess. On being pointed out it was intimated that the issue would be taken up with the Director School Education, Jammu (July 2011).

1.1.20 Micro-nutritional supplementation to Children

MDM guidelines also envisage that the meals should be supplemented with appropriate interventions relating to micro nutrient supplementation and de-worming through administration of (a) six monthly doze for deworming and vitamin A supplementation (b) weekly iron and folic acid supplement, zinc and (c) other appropriate supplementation depending on common deficiencies found in local area. For this, technical advice and doses were to be obtained by schools from the nearest Government Hospitals/PHCs and funding was to be made by the State Government under MDM programme. Besides, weighing machines and height recorders were also to be kept in the schools for detecting mal-nutrition cases.

It was seen that neither any funds were allocated for this intervention nor any student got medically examined for nutritional deficiencies in the schools of test-checked districts resulting in non-detection of health problems which could have been rectified at the early stage. The CEO, Rajouri intimated (July 2011) that the matter had been taken up with the Health Department for providing such facilities. The other CEOs did not reply to the audit observation.

1.1.21 Asset Management

In order to safeguard against loss, misuse of assets, and to help in assessing future requirements of the Department, maintenance of Register of Assets at district/zone/ school level was a prerequisite. However, it was noticed in six test-checked districts that no records relating to assets created were maintained. Non-maintenance of records had led to misuse and idling of assets and purchase of assets in excess of the actual requirements.

1.1.22 Monitoring and Evaluation

Elementary Education Programme had not been evaluated at any level by any external or internal agency. There was no system evolved at Administrative Department level to monitor the programme / scheme / projects. On being pointed out in audit, Administrative Department stated (June 2011) that the monitoring of programme was being done by two Directors of Education which was not based on facts as no monitoring was done at Directorate level. Internal control systems though existing were not subject to periodical reviews to ensure that they remained adequate and appropriate.

Director Education Jammu had not conducted any inspection of Primary / Upper Primary Schools for getting an on-the-spot assessment of performance activities nor maintained any inspection notes. On this being pointed out (May 2011), the Director School Education Jammu stated that it would be done in future. Although University of Jammu and Kashmir were nominated by the Ministry of Human Resources and Development in January 2004 for monitoring SSA programme and were paid ₹ 1.50 lakh as advance, yet neither any monitoring strategy was formulated nor any monitoring reports created at PDSSA Level. Even Works wing of the Project Director, SSA and Director Education, Jammu were not aware of financial progress of works completed and those in progress.

1.1.23 Conclusion

Despite all efforts of the GOI and the State Government, providing "Education to all" still remains a distant dream. Non-preparation of long and short-term plans based on ground realities, non-monitoring of schemes at all the levels and inadequate internal control mechanism had hampered implementation of the programmes at the school/zonal levels. Mid-term appraisal of ongoing CSSs (SSA &MDM) had not been conducted for possible corrections, if needed. Cases of financial irregularities viz. advances paid and awaited adjustment accounts, diversion of funds, abandoned school buildings resulting in unproductive expenditure were noticed in a large number of cases which had dented programme implementation. Huge unspent balances were noticed at every level.

1.1.24 Recommendations

- ***Action plans should be linked to grass root indicators and performance and prepared by dovetailing funds from different sources to adopt a holistic approach to derive maximum benefit out of investments.***
- ***Effective monitoring at all levels, revival of systematic and strong internal control system, conducting of inspections by top and middle level functionaries should be established to give a boost to the ongoing programme.***

- ***External and Internal evaluation should be carried out to ascertain the impact of the programmes.***
- ***There is an immediate need for establishing reliable and efficient Management Information System.***
- ***DIETs need to be strengthened and held responsible for training of community members, teachers and other functionaries associated with the Programmes for improving educational standard of students.***
- ***Management of SSA funds needs to be strengthened.***
- ***Infrastructure development works should be taken up only after formulating plans in consultation with VECs, NGOs, women participants, VECs, eminent teachers and other efficient educational functionaries.***
- ***Rationalization of deployment of teachers and smooth flow of grants viz. SG, SMG & TG to the school level should be ensured.***

AGRICULTURE PRODUCTION DEPARTMENT

1.2 Command Area Development and Water Management Programme

Command Area Development and Water Management (CAD & WM) Programme was introduced by the GOI with the objective of bridging the gap between irrigation potential created and irrigation potential utilized through micro-level infrastructure development and efficient Farm Water Management. The Programme involves execution of On Farm Development (OFD) works like construction of field channels and field drains, reclamation of water logged areas, renovation and rehabilitation of Minor Irrigation (MI) tanks, correction of system deficiencies of outlets up to distributaries, etc. Performance review of the Scheme revealed deficiencies in implementation process leading to delays in overall coverage of the identified Command Area.

Highlights

- ***Delay in release of funds received from the GOI at the Finance Department level ranged between 25 and 46 days and at the Directorate level between 27 and 252 days.***

(Paragraph: 1.2.7)

- ***Proposals for release of GOI assistance during 2007-11 were submitted to the GOI with delays ranging between one and four months from the due dates of submission.***

(Paragraph: 1.2.7)

- ***No data relating to topographical surveys, as envisaged in the guidelines, had been maintained by the Department.***

(Paragraph: 1.2.9.1)

- ***Participatory Irrigation Management (PIM) Act had not been enacted by the State and legalized Water User Agencies (WUAs), a pre-requisite for ensuring public participation in the programme, had not been formed.***

(Paragraph: 1.2.9.3)

- ***Though achievements against annual targets for construction of field channels and drains were satisfactory, pace of overall implementation of the Projects had been tardy.***

(Paragraphs: 1.2.9.4 and 1.2.9.7)

- ***Lack of post construction maintenance had resulted in damage to the created assets (field channels/drains).***

(Paragraphs: 1.2.9.6 and 1.2.9.7)

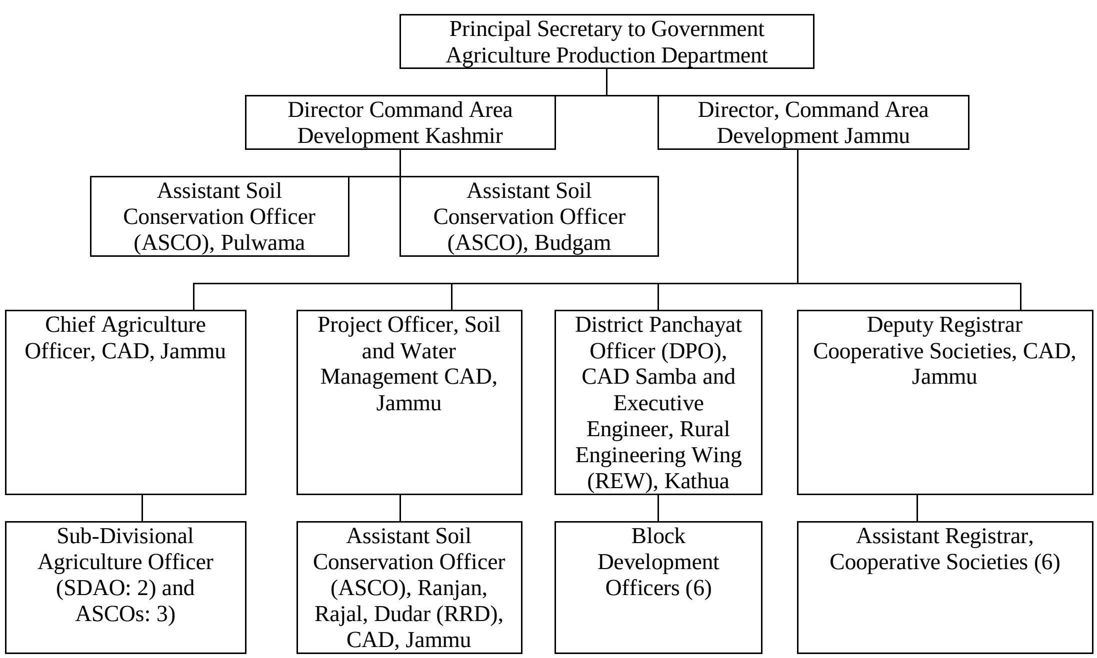
1.2.1 Introduction

To improve the socio-economic condition of farmers through enhanced agriculture production and productivity, the GOI launched (1974) 'Command Area Development (CAD) Programme'. The objective of the programme was to bridge the gap between irrigation potential created and irrigation potential utilized through micro-level *Infrastructure Development* and efficient *Farm Water Management*. The programme was restructured (April 2004) by the GOI to incorporate water resource management holistically and re-named as 'Command Area Development and Water Management Programme' (CADWMP). The programme involves execution of *On Farm Development* (OFD) works like construction of field channels and field drains, reclamation of water logged areas, renovation and rehabilitation of Minor Irrigation (MI) tanks, correction of system deficiencies of outlets up to distributaries, etc. The Programme also involves *Software Activities* like adaptive trials, demonstrations, training of farmers and evaluation studies, etc. Besides, activities covered under *Rashtriya Krishi Vikas Yojna (RKVY*) - a 100-*per cent* Centrally Sponsored Scheme (CSS) - and *Bani* CAD - a State Sponsored Scheme - also relate to the Programme. The activities under the Programme are funded by the GOI and the State Government. The State Government also obtains loans from NABARD for this purpose.

1.2.2 Organisational setup

At State Level, the Programme is implemented under the overall supervision of the Principal Secretary to Government of Jammu and Kashmir, Agriculture Production Department. The organisational chart is as under:-

Chart-I



1.2.3 Scope of Audit

Out of thirty-two (32) different projects covered under the Programme, 18 are funded by the GOI and the State Government on sharing basis, three are exclusively funded by the State Government, and 11 supported by NABARD assistance. A performance review of the Programme covering the period 1991-98 featured in the Report of the Comptroller and Auditor General of India for the year ended 31 March 1998. The review had, however, not been taken up by the Public Accounts Committee for discussion. The present performance review covers the period from 2006-07 to 2010-11. Records of two Directors, six ASCOs, one Project Officer (Soil and Water Management), and one Chief Agriculture Officer (CAD) were test-checked between December 2010 and April 2011, covering an expenditure of ₹ 43.25 crore.

1.2.4 Audit Objectives

The main objectives of the performance review were to assess whether the:-

- scheme was implemented in accordance with the guidelines issued by the GOI/State Government;
- targets were fixed on a realistic basis and achieved economically and efficiently;
- objectives of enhanced production and productivity of crop were achieved;
- system of monitoring was in place; and
- impact evaluation studies were conducted.

1.2.5 Audit Criteria

Audit findings were benchmarked against the following criteria:-

- Guidelines issued by the GOI/State Government,
- Project reports/action plans of various projects/schemes, and
- Financial rules of the State and orders issued thereunder.

1.2.6 Audit Methodology

An entry conference was held in January 2011 with the Directors of Command Area Development, Jammu and Kashmir wherein objectives, scope and audit criteria were discussed. An exit Conference was held on 13th October 2011 with Principal Secretary to Government of Jammu and Kashmir, Agriculture Production Department. Out of 26 DDOs, records of all the 10 DDOs connected with implementation of schemes were reviewed. The Rural Development Department (06 units), Registrar Co-operative Societies (06 units) and District *Panchayat* Officer (DPO), Samba, Executive Engineer, REW, Kathua (02 units) who administered only Non-plan funds, primarily for salary and other administrative purposes, and submitted their progress reports to the respective

Administrative Departments were not taken up for audit. Replies/response of the Department have been incorporated at appropriate places.

1.2.7 Financial Management

CADWMP has component-wise[6] sharing of funds between GOI, State Government and beneficiaries (only in case of field channel works). Besides, some of the components are funded with NABARD assistance.

Pending finalization of the Annual Action Plan (AAP), funds to the extent of 25 *per cent* of the previous year's State share are released to the implementing units by the State Government. The remainder of the State's share is released after approval of the AAP. The Central share is released by the GOI in two installments of 70 and 30 *per cent* each during the course of year. The position of funds released and expenditure incurred thereagainst during 2006-11 is indicated in following table:-

Table 1.2.1

(₹ in crore)

Year	Central Share				State Share/ NABARD Loan		Total fund available	Total Expenditure
	Opening balance	Releases	Expenditure	Closing balance	Releases	Expenditure		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) =(2+3+6)	(9)=(4+7)
2006-07	0.22	6.06	6.11	0.17	9.53	9.02*	15.81	15.13
2007-08	0.17	7.78	6.86	1.09	9.85	9.81	17.80	16.67
2008-09	1.09	12.93	13.97	0.05	7.78	6.27	21.80	20.24
2009-10	0.05	16.28#	16.04#	0.29	11.34	11.26	27.67#	27.30#
2010-11	0.29	14.78	14.70	0.37	18.00	18.00	33.07	32.70
Total		*57.83*	*57.68*		*56.50*	*54.36*	*116.15*	*112.04*

*[Source: Information furnished by agriculture production department, # Includes releases/expenditure of RKVY-₹ 0.88 (J) and ₹ 1.08 (K) crore, *Includes expenditure of ₹ 0.48 (0.27 –J & 0.21 -K) crore of NABARD released in 2005-06]*

The Department was able to spend ₹ 112.04 crore (96 *per cent*) out of ₹ 116.15 crore released during 2006-11. However, the following was noticed in audit.

- Prior to April 2008, letter inviting proposals for release of central assistance on *adhoc* basis for the first quarter and for regular releases in subsequent quarters were being sent every year to all States by the MoWR prescribing due dates for submission of proposals. For subsequent installments, the State Government was required to send expenditure and physical progress made upto the preceding quarter of the year and the anticipated expenditure and progress for the subsequent quarters of the year. However, from 2008-09 onwards, the Central assistance is released in two instalments. First instalment is released on ad-hoc basis upto June on receipt of the Certificate/Statement showing utilization of the central assistance provided in the preceding year, physical progress in the

6 Field channels:-50:40:10; Field drains:-50:50; Adaptive Trials/Demonstration:-75:25

previous year, quarterly targets fixed for the current financial year (in the prescribed formats). The second instalment of the central assistance is released only as a regular release for rest of the year after receipt of duly certified statements (in the prescribed proforma) showing the physical progress and actual expenditure incurred and other relevant information.

It was, however, seen that the proposals (containing details of UCs/physical progress for the preceding year and quarterly targets for the current financial year) during 2006-11 had been submitted to the GOI with a delay ranging between one month and four months from the due dates of submission as detailed below.

Table 1.2.2

Year	Due date of submission of proposals to GOI	Actual dates of submission	Delay in months
2006-07	July 2006	August 2006	01
2007-08	July 2007	September 2007	02
2008-09	June 2008	November 2008	04
2009-10	June 2009	October 2009	03
2010-11	June 2010	October 2010	03

This led to release of GOI share in the third and fourth quarters of the financial years resulting in rush of expenditure in the last quarter (ranging between 36 and 74 *per cent*).

- Physical works and expenditure were to be so planned as to avoid rush of expenditure during the last quarter particularly during the months of February/March. Further, as per the standing instructions of the Ministry of Finance, not more than 33 *per cent* of the funds were to be released by the Central Government in the last quarter of the Financial Year and not more than 15 *per cent* of the funds were to be released in March.

  It was seen that in March alone, the releases ranged between 24 and 66 *per cent* during 2006-10 except for 2010-11, in which second installment of 30 *per cent* had not been released by the Administrative Department as of March 2011. This also led to release of 63 *per cent* of the annual GOI share to the Department in the last quarter against the prescribed norm of 33 *per cent* during 2006-11.

- The GOI share for the years 2006-11 (₹ 54.97 crore) was released by the State Finance Department to the Department belatedly, with delays ranging between 25 and 46 days as against the envisaged period of 15 days. Apart from delays in the release of the GOI share by the State Finance Department, there were delays (ranging between 27 and 252 days) in release of funds, received under the State as well as the Central share, by the Directors to the field units. In reply, the Director, CAD, Jammu stated (January 2011) that part of the funds were released only after due deliberations on the Action Plan received from implementing agencies during 2009-10. The Director, CAD, Srinagar stated (October 2011) that the delays were procedural. Replies are not tenable as there was no need of deliberating upon the Annual Action Plans once these are approved and funds are released by the GOI/State. The deliberation on the Action Plan subsequent to approval further suggests that these had not been vetted properly before submission to the GOI for approval. Reply of the State Finance Department for delay in releases though called for (July 2011) was awaited.

- Audit scrutiny revealed that in Kashmir Division the releases and expenditure (2006-11) booked by the Director, Command Area Development, Kashmir and communicated to the GOI and State Government were at variance with the figures actually booked by the sub-divisions as detailed below.

Table 1.2.3

(₹in lakh)

Year	Shown by DDO		Booked by Director		Excess/ Less	
	Releases	Expenditure	Releases	Expenditure	Releases	Expenditure
2006-07	649.73	628.81	600.76	580.71	(-) 48.97	(-) 48.10
2007-08	1079.59	967.87	1080.05	968.31	0.46	0.44
2008-09	1266.40	1266.37	1268.88	1268.88	2.48	2.51
2009-10	1581.81	1576.78	1532.58	1527.56	(-) 49.23	(-) 49.22
Total	**4577.53**	**4439.83**	**4482.27**	**4345.46**	**(-) 95.26**	**(-) 94.37**

(Source:-Monthly Expenditure statements/Quarterly Progress Reports)

A variation of ₹ 95.26 lakh and ₹ 94.37 lakh in quantum of funds released and expended, respectively during 2006-10 had led to communication of incorrect figures to the GOI. On this being pointed out, the Director CAD Kashmir informed (October 2011) that incorrect communication of figures was a result of non-accountal of backlog amounts which, based on the audit observation, have been rectified. The reply indicates that proper mechanism in monitoring and reconciliation of funds had not been carried out from time to time.

1.2.8 Planning

The objective of the CADWMP is to bridge the gap between irrigation potential created and that utilized. This is to be done through infrastructure development and efficient water management. The conveyance of irrigation water upto and within the farms and its distribution to different farm owners plays a key role in deciding the overall efficiency with which the created water resources can be made available for actual use. To achieve this in a planned manner, areas which require interventions through Government sponsored programmes are to be identified, which would then serve as a database to the Department. Areas requiring immediate attention are required to be prioritized for tackling the problems in a phased manner.

It was seen that the Department had not prepared any long term perspective plan for management of the Command Area in the State and the actual implementation had been restricted to selection of areas on need-basis and preparation of the Annual Action Plans based on the identified projects.

It was further seen that actual Command Area requiring intervention in the entire State had not been identified. Areas covered under various programmes in the State were without definite notification and had been taken up on need-basis. It was stated by the two Directors of CAD that on the basis of irrigation potential created, the areas have been identified and brought under CAD activities. The fact, however, remains that despite programme implementation going on since 1974 in the State, non-identification of overall Command area and non-formulation of a perspective plan had resulted in unplanned selection of the areas without any assessment with regard to actual area still pending coverage in the State.

1.2.9 Programme Implementation

The components of the programme executed during the review period included

- survey, planning, and designing viz. preparation of maps for designing and alignment of land development works, water courses, etc.;
- construction of field channels for adequate and regular flow of water to the tail end;
- enforcing proper regulation of water so as to ensure availability of water to each beneficiary;
- construction of field drains including maintenance/remodeling/de-silting of existing choked drains to drain out excess water from farms; and
- software activities viz. training of farmers and officers of implementing agencies, demonstrations, etc**.**

1.2.9.1 Survey, Planning and Designing

Guidelines provided for conducting topographic survey for proper planning and designing of 'On Farm Development (OFD) works[7]' to ensure their quality. Also, soil survey was to be conducted for crop planning and undertaking proper treatment measures to realize full crop potential. The topographic and soil survey maps of the project are to be maintained by the CAD Authorities.

Audit scrutiny of the Project Reports revealed that the Department had kept provision for detailed soil survey for preparation of maps for designing and alignment of land development works/water course/field channels and a separate provision of funds was kept for this activity each year.

Following significant points were noticed:-

- Though soil survey and preparation of maps had been carried out in Kashmir Division and details of land surveyed had been recorded in the relevant records,

[7] Which include construction of field channels and drains, etc.;

same had not been done in Jammu division. It was seen that despite spending ₹ 54 lakh during 2006-11 on the proposed survey of 13 projects in Jammu division, no data relating to survey and micro-level maps had been maintained by the ASCOs connected with execution. Though labour had been engaged for surveys and paid through muster-sheets, yet survey reports had not been prepared. Further, the Muster Sheets did not contain names of beneficiaries or details of land surveyed. Non-maintenance of records relating to survey renders the expenditure incurred questionable. The Director, CAD, Jammu stated (October 2011) that concerned ASCOs had maintained the data in the form of progress recorded on Muster Rolls and that beneficiary names and details of land survey are recorded on completion statements. The Director further informed that, based on audit observations, the instructions would be followed in future. However, the fact remains that the reply of Director, contradicts the replies furnished (December 2010-April 2011) by the ASCOs that survey data had not been maintained and same would be maintained in future.

- Contrary to the assertion in the completion report of 'Kashmir Kathua Canal Project' that soil survey samples were drawn from different areas of the project and analysed at ATTC[8] (Laboratory) Chack Jarallan, an independent verification by Audit from the laboratory revealed that no samples had been sent to the lab by ASCO Sarore (who executed the project) from inception of the project in 2003-04 till its completion. Similarly, two[9] ASCOs of the Jammu Division had not sent any sample to the testing lab during 2006-10.

1.2.9.2 On Farm Development (OFD) Works

Construction of field channels and field drains are the main components of OFD. Among these, field channels comprised about 82 *per cent* of the programme activity during 2006-11. All the works under the component were to be got executed through registered Water User Associations (WUA) under the overall supervision of CAD staff.

1.2.9.3 Water Users Association

To imbibe amongst the beneficiary farmers a sense of ownership, the guidelines underline beneficiary participation as the central theme of the Programme. The Programme was accordingly to be implemented only in those project areas where legalized associations had been formed and were effective. The GOI assistance was conditional upon enactment of Participatory Irrigation Management (PIM) legislation. Till this was done, alternative arrangements were to be made for formation and empowerment of Water Users Associations (WUAs) which were to be in place before the project components were taken up. Besides, a functional grant to WUAs was to be

[8] Adaptive Trials-cum-Training Centre (ATTC)
[9] Dayalachak and Supwal

provided @ ₹ 600 per Ha, revised (2008-09) to ₹ 1000 per Ha, to be shared by the GOI, the State and the beneficiaries (farmers) in the ratio of 45:45:10 for maintenance of Field Channels.

During review of the projects, Audit noticed that the above provisions of the guidelines had not been observed as mentioned hereunder:

- The Participatory Irrigation Management (PIM) Act had not been passed as of March 2011, with the result that no legalized WUAs existed in the State. The Director, CAD Jammu/Kashmir informed (October 2011) that formulation of the PIM Act was under active consideration of the Administrative Department.
- Contrary to the claim of the Department that works had been got executed through *adhoc* WUAs, it was seen in Kashmir Division that *adhoc* WUAs had been formed belatedly (with delays ranging between one and eight years) after the start of the projects and in Jammu Division it was seen that no records such as resolutions of *adhoc* WUAs to suggest their participation was found on record. Though in the Kashmir Division the payment bills drawn had been endorsed in favour of the concerned *adhoc* WUAs, in Jammu Division it was seen that these had been drawn by the departmental officers without any endorsements indicating that the works had been executed departmentally.
- It was observed that some of the field channels constructed prior to 2008-09 were in a dilapidated condition due to their non-maintenance. This was a fallout of non-formation of WUAs who would have taken care of these assets by means of functional grants.

1.2.9.4 Field Channels

Construction of field channel is the main activity under the programme as execution of this component results in reduction of seepage of water and ensures free flow of water to last field/each holding.

During 2006-11, as many as 21 Projects envisaging *inter-alia* construction of field channels were under implementation out of which nine projects had been sanctioned prior to 2006-07. This does not include eleven NABARD assisted projects. It was seen that the targets set in the original Project Reports had not been adhered to due to delay in approval of the Project Reports and also due to insufficient funding subsequent to approvals. The annual targets for various activities had been restricted to the financial ceilings. Though the achievements against annual targets set according to the financial ceilings, had been satisfactory, the overall implementation of the projects had been tardy and huge areas targeted for coverage in the original project reports had remained uncovered as of March 2011 as depicted in the following table.

Table 1.2.4

Achievement against Targets set in original Project Reports

(Area in hectares)

Division	Number of projects	Area to be covered during 2006-11 as per Targets set in initial project Reports	Actual Annual targets	Achievements during 2006-11	Uncovered area (Ha)	Shortfall (%age)
Kashmir	16	48,957	29,233	28,988	19,969	41
Jammu	5	26,733	21,210	19,812	6,921	26
Total	**21**	**75,690**	**50,443**	**48,800**	**26,890**	**36**

(Excluding NABARD schemes)

As can be seen, non-implementation of projects in accordance with the original Reports resulted in under-coverage by about 41 *per cent* in the Kashmir Division and 26 *per cent* in Jammu Division.

The shortfall in achievement of physical targets resulted in delay of two to three[10] years in completion of three projects and five to 22 years in four[11] on-going projects.

Audit analysis of six projects in Kashmir Division revealed that the delay in completion had *inter-alia*, resulted in cost escalation aggregating to ₹ 14.11 crore due to revision of rates in April 2004 and April 2008. These delays had resulted also into non-accrual of the intended benefits to the beneficiaries in time.

The Director, CAD, Kashmir stated (March/October 2011) that shortfall in achievement of targets was due to non-receipt of sufficient funds from the GOI/State Government for execution of the works in various projects and consequent restriction of activities to the annual financial ceilings. The reply should, however, be seen in the light of the fact that the benefits of the projects conceived about 22 years ago had yet to be realized.

1.2.9.5 Beneficiary contribution

As per the programme guidelines, for construction of field channels the Government provides 90 *per cent* funds and the remaining 10 *per cent* is to be collected by WUAs as mandatory contribution from the beneficiaries in advance to imbibe in them a sense of participation and ownership. The CAD authorities are required to receive the beneficiary share from the WUAs or obtain, in lieu, a promise in writing of the contribution in the form of free labour.

It was seen that ₹ 35.86 crore had been spent on construction of Field Channels covering 19,662 hectares in Jammu Division during 2006-11 on four[12] Central sponsored projects.

10 Aharbal, Bringi and Martand

11 Rafiabad, Zaingeer, Lower Jehlum and Sindh catchment

12 Ranbir Canal, Kashmir Kathua Canal in Jammu region, Doda-Rajouri-Gool-Sanghaldhan, Poonch Cluster Command project.

Test-check of 1,063 bills, involving ₹ 10.40 crore, in four[13] ASCOs revealed that against the prescribed 10 *per cent* beneficiary share of ₹ 1.05 crore, the CAD authorities had deducted ₹ 68 lakh only from the final bills of works as free labour contribution. It was seen that though ₹ 68 lakh had been deducted from the bills as free labour, no entry with regard to this labour component had actually been recorded in the Muster Sheets. This indicates that the beneficiary contribution had been deducted mechanically without any actual free labour contribution. The audit contention was strengthened during an on-the-spot interaction of the Audit team with the beneficiaries, who admitted to not having contributed anything in cash or as free labour. This rendered the claim of the Department of receipt of 10 *per cent* free labour questionable.

The Director, CAD, Jammu stated (October 2011) that though free labour contribution had not been recorded in the Muster Sheets, same had been recorded in completion statements and that compliance to Audit observation would be done in future. The reply was however not tenable as none of the completion statements test-checked by Audit contained such entries. The reply should further be viewed in light of the fact that the *modus operandi* for the execution of the OFD works had defeated the participatory aspect of the Programme and also resulted into sub-optimal performance of the project due to lack of beneficiary participation and asset ownership.

Plum Concrete Field Channel
(RS Pura/December 2010)

Interaction with beneficiaries
(RS Pura/December 2010)

1.2.9.6 Maintenance of Field Channels

As highlighted in paragraph 1.2.9.3 some of the field channels constructed prior to 2008-09 were in a dilapidated condition due to their non-maintenance in absence of WUAs. However, works executed in 2008-11 were found to be in good condition as the Department had since switched over from pitching/grouting channels to plum-concrete channels and the cost component had also been enhanced by the GOI. The farmers acknowledged percolation of benefits viz. free flow of water to their fields in these projects and reduction in loss of water due to seepage.

[13] ASCO Supwal, Sarore, RRD, Dayalachak

<table>
<tr><td></td><td></td></tr>
<tr><td>Under-construction Plum concrete Field Channel (RS Pura/December 2010)</td><td>Well maintained Plum concrete Field Channel (RS Pura/December 2010)</td></tr>
<tr><td></td><td></td></tr>
<tr><td>Damaged field channel</td><td>Blocked field channel</td></tr>
</table>

1.2.9.7 Field Drains

The drainage under the programme includes removal of excess water from farmers land and re-modelling/de-silting of existing choked drainage lines.

Though there was minimal shortfall in achievement of annual targets set in accordance with the annual financial ceiling, there was overall shortfall in achievement of targets set in the initial Project Reports as depicted in following table.

Table 1.2.5

Achievement against Targets set in original Project Reports

(Area in hectares)

Division	Number of projects	Area to be covered during 2006-11 as per Targets set in initial project Reports	Actual Annual targets	Achievements during 2006-11	Shortfall (Ha.)	Shortfall (%age)
Kashmir	15	32,122	12,722	12,722	19,400	60
Jammu	5	17,553	9,764	9,439	8,114	46
Total	**20**	**49,675**	**22,486**	**22,161**	**27,514**	**55**

As can be seen, there existed huge under-coverage of 60 *per cent* in the Kashmir division and 46 *per cent* in Jammu division against the targets set in the original project reports.

Following further significant points were noticed.

- The project reports of two[14] projects out of four centrally sponsored projects of Jammu Division envisaged funding in the ratio of 80:20 (revised to 70:30 in case of one[15] project) on construction of field drains and construction of drop structures/culverts respectively. The drop structures/culverts were to be provided for crossing of farmers and farm machinery at vulnerable points for systematic management of farm land. It was, however, observed that no such structures had been constructed in Jammu division and the allocation for the purpose had been diverted for construction of drains. Test-check of 276 bills (cost ₹ 1.44 crore) in four ASCOs revealed that 20 *per cent* allocation (₹ 23.90 lakh) had been absorbed in the overall cost of field drains on the pretext of less progress of work under water/mud. Physical inspection of sites also revealed that the drains constructed/re-modeled had been damaged due to absence of such structures at many places, thus, defeating the purpose of construction of drains.

  The Director, CAD, Jammu intimated (October 2011) that the component of drop structures/culverts could not be undertaken due to revision of cost of the projects necessitated due to revision (2004 and 2008) of PWD schedule of rates, which resulted in inclusion of earth work only within the ceiling limits and thus non-inclusion of such structure. The replies are not tenable as the projects revised in 2004 and 2010 provided for 20 and 30 *per cent* cost for construction of such structures.

Damaged Field Drain

Blocked Field Drain

- Apart from the Department, various other departments' viz., Rural Development Department and the Agriculture Department of the State, also carry out execution of field drains. It was noticed that the drains constructed/remodeled by the Department had not been marked so as to avoid duplication of work by the same or other departments.

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14 Ranbir Canal and Kashmir Kathua Canals projects

15 Ranbir Canal

1.2.10 NABARD Assisted projects

During March to June 2006, 11 projects[16] were prepared/approved for 'On Farm Development works' under NABARD assistance at a cost of ₹ 12.12 crore[17] (excluding the beneficiary share) to be implemented by three ASCOs[18] for completion in one year to three years. The position of allotment of funds and expenditure incurred thereagainst during 2006-09 is given in the table.

Table 1.2.6

(₹in crore)

Year	Allotment			Expenditure		
	State Share	NABARD loan	Total	State Share	NABARD loan	Total
2006-07	0.27	2.00	2.27*	0.27	2.48	2.75*
2007-08	Nil	5.00	5.00	Nil	5.00	5.00
2008-09	0.20	Nil	0.20	0.20	Nil	0.20
Total	**0.47**	**7.00**	**7.47**	**0.47**	**7.48**	**7.95**

*(*An amount of ₹48 lakh released during 2005-06 (NABARD Loan) was utilized during 2006-07)*

It was seen that against an outlay of ₹ 12.12 crore (NABARD: ₹ 11.00 crore and State: ₹ 1.12 crore) during the period, ₹ 7.95 crore[19] (NABARD: ₹ 7.48 crore and State: ₹ 0.47 crore) only had been spent on construction of Field Channels and Survey and Planning. The projects were not completed within the stipulated period in Jammu and abandoned during 2008-09. This resulted in non-achievement of physical targets in Jammu division with shortfall ranging between nine and 33 *per cent* in Field Channels and 100 *per cent* in *Nallah* Bank Erosion Control. In Kashmir division, the works had, however, subsequently been merged with other ongoing/proposed Centrally/State sponsored schemes. Reasons for inadequate NABARD releases and non-release of due State share, though called for (March 2011), were not furnished.

Essential components like *Warabandi* and Training and Adaptive Trials/ Demonstration which constitute important component of the programme were not executed in any of the projects. In four projects, these components were not even proposed in the project reports.

The Chief Agriculture Officer, CAD, Jammu stated that these components were excluded after discussions with the consultant of NABARD due to financial implication involved being of little importance. The reply is not tenable as the OFD Works executed were to be supported invariably by *Warabandi* component as per guidelines of the CAD & WM and the Adaptive Trials/Demonstrations also constituted an important aspect of the scheme. Besides, the Department should have taken steps to have these project funded from State resources as had been done in the case of projects in Kashmir Divisions.

[16] Jammu: 8 and Kashmir: 3
[17] Jammu: ₹ 5.95 crore and Kashmir: ₹ 6.17 crore
[18] Two ASCO's in Jammu and one in Kashmir Division
[19] Jammu: ₹ 4.45 crore and Kashmir: ₹ 3.50 crore

Following further points were noticed.

- The projects envisaged increase in Crop/Fodder production from 4,23,263 Quintals (Crop: 1,47,564 Qtls and Fodder: 2,75,699 Qtls) valuing ₹ 13.21 crore to 7,53,135 Quintals (Crop: 342985 Qtls and fodder: 410150 Qtls) valuing ₹ 29.45 crore, on completion of the projects. It was seen that no assessment of crop production had been carried out by the Department. The Chief Agriculture Officer, CAD Jammu stated that the results of crop production are to be recorded by the Agriculture Department working in the area. The reply is not tenable as the Command Area Development Department has an Agriculture Wing comprising two Sub-Divisional Agriculture Officers (SDAO's) which should have recorded the impact of implementation of the schemes vis-à-vis crop production to quantify the envisaged benefits.
- Physical check of the works revealed that the works were in a dilapidated condition, which was attributed by the CAO (CAD) Jammu to non-provision of funds for restoration or renovation of damaged channels in NABARD Scheme and that these were to be maintained by the farmers themselves. The reply needs to be seen in the light of the fact that maintenance of the channels by the farmers was not possible in view of non-formation of WUAs which could have looked after the damages with the help of functional grants provided under CAD programme.

	
Blocked Field Channel (Malpur Bhathera- Akhnoor)	***Damaged Field Channel (Malpur Bhathera- Akhnoor)***

1.2.11 Recording of on Farm Development Works in Revenue records

Scheme guidelines provide for the OFD works, executed on different completed projects, to be entered in revenue records including the maps as part of irrigation system. It was seen that six projects (3 each in Kashmir[20] and Jammu[21]) completed during 2006-11 had

[20] Aharbal, Bringi and Martand

[21] Poonch Cluster, Kashmir-Kathua Canal and Bani CAD

not been entered in revenue records. The department stated that the matter would be taken up with the Revenue authorities.

1.2.12. Warrabandi

As per the Guidelines, *Warabandi* comprises deciding, in consultation with farmers, the day and time of delivery of water commensurate with the size of the holding(s). This activity is to be initiated immediately after the field channels have been constructed and is an important component of the Programme, to be supported by State Government funding and enforced by WUAs.

The regulatory structures laid down by the GOI for enforcing *Warabandi* were

- Formation of WUAs.
- Construction of proportionate modules viz**.,** Adjustable Proportionate Modules (APMs) at outlet head and of measuring devices in field channels such as parshall flumes, notches or weirs depending upon situation.
- Providing gates for the outlets in case of un-gated pipe outlets.
- Display boards at outlets showing the name of outlet, discharge, Culturable Command Area (CCA**)**, name of farmers, area of the fields, their turn indicating day and time for taking water, duration of time, the name of farmers associations, their functions/responsibilities, etc.

1.2.12.1 Enforcement of Warabandi

During 2006-11, a total of 48,800 Ha (28,988 Ha. in Kashmir and 19,812 Ha. in Jammu division) of land had been covered through field channels in respect of 21 projects[22]. However, it was noticed in audit that against this, *Warabandi* had been achieved in 13,762 Ha[23] only (i.e. 28 *per cent* of field channels constructed) leaving the balance area unattended as depicted in the following table.

Table 1.2.7

Achievement against Targets set in original Project Reports

(Area in hectares)

Division	Number of projects	Area to be covered during 2006-11 as per Targets set in initial project Reports	Actual Annual targets	Achievements during 2006-11	Shortfall (Ha)	Shortfall (percentage)
Kashmir	15	51,621	10,640	10,656	40,965	**79**
Jammu	5	23,247	5,383	3,106	20,141	**87**
Total	**20**	**74,868**	**16,023**	**13,762**	**61,106**	**82**

22 Kashmir: 16 and Jammu: 5

23 Kashmir: 10656 Ha. and Jammu: 3106 Ha.

The PO (S&WM), CAD Jammu stated that non-achievement of targets was due to less release of State share. The PO further stated that though the action plan was submitted as per targets fixed each year, the targets had to be re-fixed as per ceiling of State share communicated by the Planning Department. Even the slashed down targets had been achieved to the extent of 58 *per cent* only. This was indicative of framing of unrealistic action plans and lack of financial planning for implementation of the project.

It was further seen that entire expenditure of ₹ 8.70 lakh (on *Warrabandi* during 2006-11) in Jammu Division had been incurred on painting of boards and walls portraying slogans for water-conservation and judicious use of water, etc. which was not connected to *Warabandi*. The records corroborate the physical inspection of sites, which showed that nowhere were the structures like APMs, drop gates etc. for *Warabandi* in place, nor did the boards display the information required under the scheme guidelines. Action of the Department rendered ₹ 8.70 lakh spent on painting of boards wasteful. Due to this, the claim of Department of having covered an area of 3106 hac. of land under warabandi in Jammu Division is doubtful.

Field channel with drop gates (Kashmir)

Field Channel without Warabandi structure

Slogans not connected with Warabandi

The Project Officer (S&WM), CAD Jammu, stated (February 2011) that despite repeated attempts, the Engineering Workshop of Agriculture Department had not supplied the gates in the absence of approval of rates. The reply was not convincing as the correspondence with the concerned Workshop showed that the Department had not pursued the matter vigorously. Director, CAD Jammu stated (October 2011) that requisite steps would be taken to provide gates.

1.2.13 Software Activities

Software activities include adaptive trials and demonstration, action research, training courses for farmers and field functionaries, monitoring and evaluation sponsored by State etc.

1.2.13.1 Adaptive Trials/Demonstrations/Trainings

Adaptive Trials consist in evolving various soil-water-crop relationships and suitable techniques for their management with a view to applying the most appropriate combination of relationship and techniques to the farmers' fields. The focus of Adaptive Trials was to bring about a switch from traditional low risk, low input and low yielding crops to high risk, high input but high yielding and profitable crops. Demonstration of scientific technology covering scientific water management and land development practices, introduction of scientific technology, introduction of suitable crops and varieties, proper dose and method of application of fertilizers, irrigation practices etc. were important for increasing productivity. These are to be taken up extensively on farmers' fields and farmers are to be provided practical training on these aspects to optimize productivity and production as per conditions of fields and above all judicious use of canal irrigation.

Action Plans (2006-11) envisaged Adaptive Trials and Demonstrations of cereals to be laid on a varying area of 0.5 and 0.4 Ha. in farmers fields with promising and preferably new varieties.

Scrutiny of the records revealed that 8,723 (Kashmir: 4,275 & Jammu: 4,448) adaptive trials/demonstrations were carried out and 595 trainings (217 in Kashmir & 378 in Jammu) were conducted after incurring an expenditure of ₹ 1.57 crore in 19 projects in both the Divisions during 2006-11 as detailed in the following table.

Table 1.2.8

Division	Year	No of projects	Adaptive Trials/Demonstration			Trainings/Awareness Camps		
			Target	Achievement	Shortfall (%age)	Target	Achievement	Shortfall (%age)
Jammu	2006-07	02	600	316	284 (47)	96	46	50 (52)
	2007-08	03	1784	1684	100 (06)	162	120	42 (26)
	2008-09	03	735	400	335 (46)	109	83	26 (24)
	2009-10	03	1400	1457	+57	80	85	+5
	2010-11	02	175	591	+416	16	44	+28
Kashmir	2006-07	07	NA	319	NA	NA	Nil	NA
	2007-08	11	NA	1053	NA	NA	15	NA
	2008-09	12	NA	1173	NA	NA	24	NA
	2009-10	13	NA	770	NA	NA	78	NA
	2010-11	15	NA	960	NA	NA	100	NA

The above table shows that there was shortfall in achievement of physical targets ranging between six and 47 *per cent* in respect of Adaptive Trials/Demonstration during 2006-09 and between 24 and 52 *per cent* in the case of Trainings/Awareness Camps in Jammu Division. The achievements were, however, more than the targets during 2009-11. The P.O (S&WM) and Director (CAD), Jammu attributed the shortfall to approval of rates and release of funds after *Kharif* season leading to negligible achievement of training in *Kharif* season. Further, it was stated that fertilizers, for demonstration/trials, were also not available on credit basis. Late release of funds and late approval of rates for different material defeated the purpose of the trials/demonstrations/trainings which were important components of the scheme.

In Kashmir division, no annual targets had been fixed. However, audit scrutiny revealed that though the department organised 217 Awareness/Training Camps and 4275 Adaptive Trials/Demonstrations in 13 projects (out of 15) at a cost of ₹ 76.35 lakh, no proper rationale was formulated for organizing such Training/Awareness Camps/Adaptive Trials for each project during the year. Neither were training/awareness camps held nor adaptive trials organized in some project during certain years.

While confirming audit contention, the ASCO stated (March 2011) that proper rationale for organizing the training/awareness camps/adaptive trials for each project during the year would be formulated in future.

Following significant points were noticed:-

- Though data relating to assessment of impact of demonstrations had been maintained, no data relating to assessment of impact of awareness/trainings on improvement of crop had been maintained. Thus, effectiveness and fruitfulness of the expenditure incurred on these items could not be ascertained in audit.
- An amount of ₹ 14.32 lakh had been spent on construction of 25 pre-fabricated field channels in Jammu division during 2006-11which was outside the scope of "Adaptive Trials/Demonstration" as per guidelines and thus resulted in diversion

of funds to that extent. The construction of such channels results in restricted access to the water source which is usually a tube well and benefits only the individual holding control over the source.

On being pointed out (December 2009/February 2011), the P.O. (S&WM), Jammu admitted the audit contention but stated that these were constructed in view of practice in vogue in the Department.

- As per procedure followed in Kashmir Division, a maximum of ₹ 10,000 was being spent on one Training camp. However, in 2009-10, ₹ 2.97 lakh was spent on eight such camps. The Director, CAD, Kashmir stated (October 2011) that apart from eight camps, the expenditure had been incurred on two mega camps in Baramulla and Anantnag which was within the prescribed norms. The reply is not tenable as the same was silent about the norms and scale being followed by the Department in organizing different types of camps.
- An analysis of details of trainings conducted during 2006-09 in Kashmir Division showed that ₹ 4.71 lakh had been booked as having been spent on training/Awareness Camps, trials and demonstrations during 2006-09 in respect of nine projects[24]. However, no such trainings had been shown conducted during the period in the project-wise annual training data made available to Audit. As such the entire expenditure of ₹ 4.71 lakh shown as incurred on training/awareness camps is questionable. Reasons for inconsistency though called for (February 2011) were not furnished to Audit.

1.2.14 Miscellaneous Observations

1.2.14.1 Soil Testing Laboratory

Under the Programme, a laboratory has been established at Check-Jaralan Bishnah for soil testing of farmer's fields so that the flow of water and dosage of fertilizers can be appropriately regulated with due regard to various other factors and thus optimize production and productivity. The laboratory with an annual optimum capacity of 13500 samples is manned by one Subject Matter Specialist, one Agriculture Assistant, one Field Assistant, one Lab Assistant and one Survey Mate. However, against the annual capacity of 13500 samples, the shortfall in utilization of the laboratory had increased gradually from 50 *per cent* in 2006-07 to 90 *per cent* in 2009-10, as given in the table below.

[24] Aharbal, Bringi, Martand, Rafiabad, Lower Jehlum, Sindhcatchment and Zaingeer, Arin-Bandipora, Kehmil-Kupwara

Table 1.2.9

Year	Targets/ capacity of lab	Actual tests conducted	Shortfall	*Percentage*
	Samples in No.			
2006-07	13500	6748	6752	50
2007-08	13500	6806	6694	50
2008-09	13500	1987	11513	85
2009-10	13500	1310	12190	90

The underutilization had resulted not only in shortfalls in the achievement of targets but also idle capacity. The Project Officer (S&WM), CAD Jammu attributed under-utilization to lack of funds even though the requirements had been projected by the office from time to time.

1.2.14.2 Release of Water and Roster schedules

Guidelines of the scheme provide for transparency in release of water and roster schedules. For this purpose, the guidelines desired creation of websites of CAD Programmes in each State/CADA's in local language. Details of roster of water supply, training programmes, results of adaptive trials were to be put on the website for the benefit of the beneficiaries. It was, however, seen that no such websites had been launched.

The Director (CAD) Jammu/Kashmir stated that the matter had been taken up with the NIC.

1.2.14.3 Dissemination of technical knowhow

In order to bridge the gap between the innovative researches made in the research Institutes, Universities, Water and Land management Institutes (WALMIs) etc, and technology adopted by the farmers in respect of crop production, use of irrigation methods, frequency of irrigation and other technical know-how in respect of irrigated agriculture land, the Department was required to collect data from these institutions and present it in an understandable form for distribution among farmers. Audit observed that no such information was obtained from the research institutes concerned.

On this being pointed out, it was stated that no such procedure existed in the State. The reply is not tenable as the Department should have explored the possibility of seeking advice on these issues from the two Agricultural universities (SKUAST) at Jammu and Srinagar. By not collecting and disseminating the information by which the farmers could be made aware of the latest technology, the Department can not absolve itself of the responsibility of providing such information to the farmers nor adequately justify spending money on various projects.

1.2.14.4 Monitoring and Evaluation

- Guidelines envisage monitoring of CAD projects as a State Subject. The State was required to constitute a Multi-Disciplinary Committee with Secretary Incharge (CAD) as its Chairman. The State Level Monitoring Committee was to meet twice a year to monitor/review the performance of the Programme.

  It was, however, seen that Multi-Disciplinary Committee had not been set up. The Director Planning in the office of Principal Secretary, Agriculture Production Department stated (December 2010) that evaluation of the projects was being conducted by Directorate of Economics and Statistics and the Programme was being monitored by GOI on regular basis.

  The Directorate of Economics and Statistics stated (March 2011) that evaluation studies of only one project viz Kashmir Kathua Canal had been conducted by the Department.

- The impact of construction of Field Drains on farmers cultivable land and their production/productivity had also not been documented which indicated the absence of a Management Information System.

1.2.14.5 Action on Report of GOI monitoring

Government of India, Ministry of Water Resources, Central Water Commission, Monitoring and Appraisal Directorate, Jammu had conducted the first monitoring of the *Martand* project in November 2007 and submitted its report in January 2008 with the following observations:-

- The contraction/expansion joints had not been provided.
- Earthen channels had not been lined with concrete to plug heavy leakage.
- Water regulating valve had not been provided at off take point of any of the field channel.
- The bottom width of concrete channel wall must be checked for earth pressure where field channels are constructed in cutting.

On an audit enquiry regarding follow-up action of the monitoring report, the Executing Agency viz. ASCO, Pulwama stated (March 2011) that these were not necessary. However, Director CAD, Kashmir stated (October 2011) that recommendation had been taken care of during execution of OFD works.

1.2.15 Conclusion

Planning of the projects was not up to the mark. Targets fixed had not been achieved. Water User Associations had not been constituted to execute works and maintain the created assets. Monitoring mechanism was virtually non-existent. Impact of the Programme on production and productivity had not been assessed.

1.2.16 Recommendations

- WUAs should be put in place and steps taken for enacting PIM Act so that WUAs are legalized.
- Proper soil survey for preparation of maps for designing and alignment of land development works/water course/field channels should invariably be got conducted before taking up of projects and detailed survey records should be maintained.
- Project Reports once formulated should be got approved in a time bound manner so as to ensure initiation of implementation process in accordance with the envisaged time frame.
- Muster sheets and connected documentation of works undertaken should be maintained so as to lend itself to full verification in regard to beneficiaries' contribution/involvement.
- Thrust should be laid on maintenance of the created assets so as to avoid wastage of the resources.
- Monitoring mechanism needs to be strengthened and impact evaluation studies conducted so as to ensure achievement of scheme objectives.

HOUSING AND URBAN DEVELOPMENT DEPARTMENT

1.3 MANAGEMENT OF DAL LAKE

Jammu and Kashmir is gifted with numerous water bodies, Dal Lake being the most famous among them. Conservation of these water bodies has been a serious challenge for the State Government due to large scale encroachments, non-availability of funds and improper management. Although some progress has been made in the scientific management of the Dal Lake, other lakes in the valley have remained largely ignored.

Highlights

The State Government had not conducted any survey for source water protection. A nodal agency for overall formulation, implementation and coordination of a comprehensive programme for pollution control in water bodies was not in place.

(Paragraph: 1.3.7)

There was considerable underutilization of funds ranging between 32 and 60 per cent during 2006-11 due to inaction of LAWDA to execute works like house boat sanitation, infrastructure development, etc.

(Paragraph: 1.3.8.2)

The DPR for conservation of the lake had not been prepared on the basis of an exhaustive investigation and survey.

(Paragraph: 1.3.8.3)

The performance efficiency of STPs was not up to the mark; as a result, ₹ 11.05 crore spent on installation of these STPs had remained largely unfruitful. Also, non-completion of IPS and Sewer works/trunk sewer/remodeling of drains had resulted into non-optimal use of installed STPs.

(Paragraphs: 1.3.9.2, 1.3.9.3 and 1.3.9.4)

Despite spending ₹ 70 lakh on pilot studies for management of solid/liquid wastes of population residing in and around Dal Lake, no considerable headway had been made on the sanitation front.

(Paragraph: 1.3.9.5)

Improper land use planning by LAWDA prior to acquiring land and delayed decision of the State Government to change the originally envisaged land-use had rendered ₹ 8.32 crore unfruitful, besides adversely affecting the rehabilitation and resettlement programme of the lake-dwellers.

(Paragraph: 1.3.10)

The monitoring by scientific advisory committee and Board of Directors was poor. Also, the internal control mechanism was virtually non-existent.

(Paragraphs: 1.3.13 and 1.3.14)

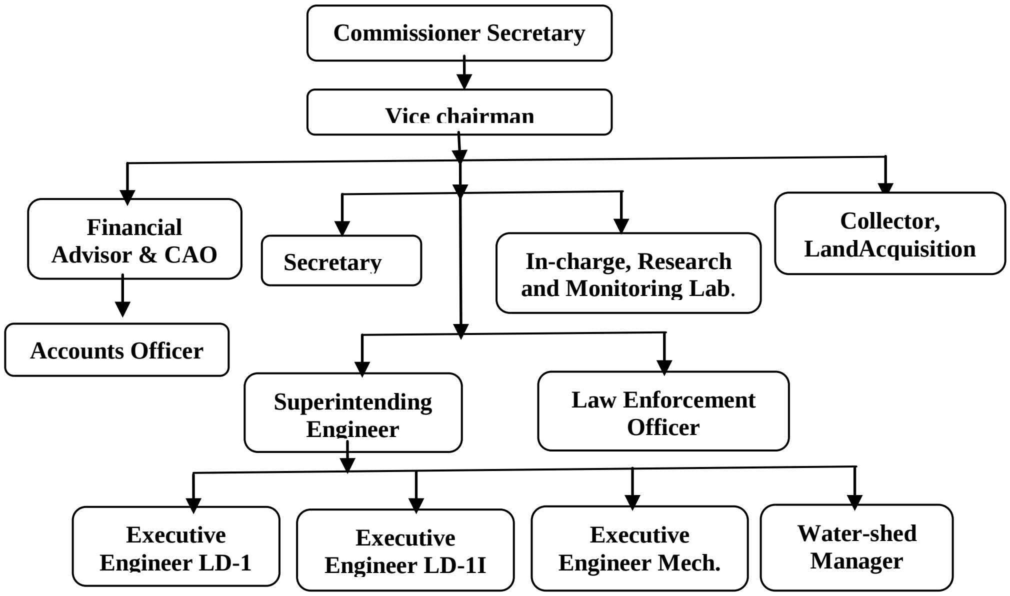
1.3.1 Introduction

Lakes are not only objects of beauty but also a source of livelihood, recreation and economic activity. As potential sources of potable water, they are valuable national assets that need to be carefully conserved. Properly managed lakes can be a veritable blessing for the community living around them for all of the above reasons. The State of Jammu and Kashmir is gifted with 38 major water bodies that together cover 743 sq. kms of area. Many of these hold great ecological and socio-economic significance for the State. All except one of these water bodies belong to the natural category. The lakes constitute the backbone of tourism which is a key revenue earner for the State, Dal Lake being particularly notable in this regard. The largest lakes in the State are Pangong Tso, Amto Gore and Tso-morari in Ladakh which are salt water lakes followed by Wular, Dal and Manasbal which are fresh water lakes. Wular is the largest in India with an area of 20 kms by 8 kms.

All the lakes in Jammu and Kashmir are being subjected to forces of degradation by anthropogenic activities. Different problems encountered in the lakes include excessive influx of sediments from the catchment areas, discharge of untreated or partially treated sewage and industrial waste waters/solid waste disposal, entry of diffused source nutrients from agricultural and forestry, improper management of storm water/combined with over abstraction, over-exploitation of lake for activities like recreation, fishing, encroachments, land reclamation resulting in lake shrinkage, shoreline erosion and impact on lake hydrology, deterioration in water quality and impact on bio-diversity, climate change etc.

The Government of Jammu and Kashmir created (March 1997) Lakes and Waterways Development Authority (LAWDA) under the Jammu and Kashmir Development Act, 1970 as an autonomous body, to serve as a one-point agency to look after, manage, and conserve the water bodies and water ways of the State of Jammu and Kashmir. LAWDA has a whole-time mandate to conserve and manage the Dal/Nigeen Lakes under National Lake Conservation Plan (NLCP) of the Government of India under the aegis of the Ministry of Environment and Forests (GOI). The organizational chart of the Authority is given in the following chart.

Chart I



The Authority is managed by a Board of Directors comprising nine members including a Chairman and a Vice-Chairman, appointed by the State Government. The day-to-day activities are looked after by the Vice-Chairman who is assisted by the officers as detailed in the hierarchy.

1.3.2 Audit Objectives

The objectives of the performance review were to assess whether:

- ✓ surveys were conducted for identification of lakes and an inventory prepared thereof;
- ✓ policies, regulations and strategies existed for addressing the conservation of lakes;
- ✓ programmes were planned, implemented and monitored to address the issues pertaining to the conservation and management of lakes; and
- ✓ nodal agencies existed for the purpose.

1.3.3 Audit Criteria

Performance review was assessed against the following audit criteria:

- Lakes and Waterways Development Authority (LAWDA) Act
- Detailed Project Reports (DPRs)
- Guidelines prescribed by Government of India (GOI)
- Plans prepared by the implementing agency

- Prescribed monitoring mechanism
- Financial Rules

1.3.4 Scope of Audit

The performance review on 'Conservation and Management System of Lakes in Jammu & Kashmir' was attempted to assess the State's performance in planning, operating and monitoring the scientific management of its lakes, some of which have been victims of increased human interference over the years due to constantly growing population and failing civic management of the lakeside towns and cities. The review covered an evaluation of the policies and programmes of the Government for conservation of lakes in the State. Since, no comprehensive policy has been formulated for lakes in the State other than Dal, the scope of this performance review was confined to Dal Lake only.

1.3.5 Audit Methodology

An entry conference was held on 26th October 2010 with the Commissioner-cum-Secretary, Jammu and Kashmir Housing and Urban Development Department, Vice-Chairman and FA&CAO of the Authority wherein audit objectives, criteria and scope of audit were discussed. An exit conference was held with the Principal Secretary-cum-Commissioner, Housing and Urban Development Department on 13th October 2011 and points emerging out of the discussions have been incorporated in the review at relevant places.

1.3.6 Policies and Strategies

The Lakes and Wetlands are presently not covered by any specific legal statute but several legislations enacted till date have provisions for conservation of lakes. Some of these are The Forest Conservation Act (1980), The Wild life Act (1972), The Water (Prevention and Control of Pollution) Act (1974) and the Environment (Protection) Act (1986).

Recognizing the importance of lakes, the Ministry of Environment & Forests, Government of India, launched the National Lake Conservation Plan (NLCP), a Centrally Sponsored Scheme exclusively aimed at restoring the water quality and ecology of the lakes in different parts of the country. The objective of the scheme is to restore and conserve the urban and semi-urban lakes of the country degraded due to waste water discharge into the lake and unique freshwater eco-systems through an integrated ecosystem approach.

The activities covered under NLCP were:

- Prevention of pollution from point sources by intercepting, diverting and treating pollution loads entering the lake. The interception and diversion works were to include sewerage and sewage treatment for the entire lake catchment area.

- In-situ measures of lake cleaning such as de-sliting, de-watering, bioremediation, and constructed wetland approach etc. depending upon the site conditions.
- Catchment area treatment and lake front eco-development which was to include bunding, fencing, shoreline development, creation of facilities for public recreation and entertainment (Children Park, boating etc.) and public area.
- Solid waste management
- Prevention and pollution from non-point sources by providing low cost sanitation.
- Public awareness and public participation.
- Other activities depending upon location specific conditions including the interface with human population.

1.3.7 Planning

A comprehensive plan that would have involved, as a first step, inventorying systematically all the water bodies of the State to scientifically and effectively tackle the issue of lake conservation in the State should have been formulated. Such comprehensive planning would have enabled the State to formulate and phase appropriate action plans to restore the health, serenity and sanctity of polluted water bodies within a timeframe.

Following short comings in policy and planning were noticed.

- ✓ The State had not conducted any survey for source water protection. Besides, complete study of lakes indicating the type, area, water volume, habitation, land-use in the catchment area, sources of pollutants, quality of water, etc. had not been prepared by the State at any point of time. Even assessment of critical risk parameters had not been carried out in respect of the major lakes except the Dal Lake. Accordingly, no comprehensive programme had been framed at any point of time to assess, monitor and control the pollution levels of the major water bodies.
- ✓ The State Pollution Control Board had been assigned (1987) the responsibility for prevention and control of water pollution issues in the State. It had confined its activities to testing the water pollution levels of Dal Lake only. With LAWDA restricting its activities only to Dal-Nigeen Lake by virtue of the State Government notification (1997), other water bodies in the State such as Wular, Mansbal, Anchar and Gilser lakes which had suffered significant habitat and water chemistry deterioration due to unhampered human activity, had remained unattended. Though programmes for conservation and management of the Dal Lake had been in operation for some years and another for Wullar had been launched in 2011-12, yet no programme for conservation and management of other lakes had been framed/ implemented by the State Government.

- ✓ To ensure effective implementation of the project, appointment of a Project Management Consultant (PMC) was a pre-requisite who would coordinate, plan and control (funding and execution) various activities undertaken under the Dal project. Despite lapse of over five years during which the programme had been under implementation, LAWDA had failed to appoint a PMC due to which the project had adversely suffered in terms of implementation of various components of the programme and consequently various performance evaluation parameters viz. water quality, animal life, etc. In reply it was stated that the consultant could not be appointed due to poor response to the tenders floated in this behalf.

1.3.8 Dal Lake Conservation Project

Among all the lakes of Kashmir, the Dal is by far the most famous- highly regarded by tourists for its serene beauty and by the locals for its rich agricultural produce also. The cultivators of the lake, known as *Mirbahri*, live on and by the lake and cultivate numerous vegetables of high quality in floating gardens known as *radh* and in lakeside plots known as *demb.* Rape-seed, maize, tobacco, melons, potatoes, onions, radishes, turnips, egg-plants, white beans, peaches, apricots, and quinces flourish on the rich soil of radh and demb. The lake also produces naturally *singhara nuts*, *jewar* (Euryale ferox), and *bumbh*. *Bumbh*, with its long stem and white flower, provides a nourishing vegetable from the former and an agreeable *sharbat* from the latter. The size of the lake has been mentioned as 6.4 kms long and 4 kms wide where it is the broadest in some early texts. Besides the springs of the lake itself, the Lake is also fed by a stream which comes from the Marsar Lake high up in the mountains. In its lower course where this stream approaches the north shore of the Dal, it bears the name of Telbal Nallah. The lake is also fed by other smaller streams.

The threat of the lake silting up with the deposit brought forth by these streams and the floating gardens (*radh*) extending all over the lake has been recognized since a long time past.

1.3.8.1 Programme Management

With a view to improving water quality of the lake and also saving it from further degradation, the State Government launched (1977) the Project ‘Conservation of Dal-Nigeen Lake’. The work on the project was got executed through the State Urban Environmental Engineering Department (UEED).

The Dal Lake Conservation Programme was approved and included in NLCP (2005-06) by MoEF, GOI with a view to addressing the problem areas by way of:

- ✓ reduction in volume of silt caused due to catchment area degradation and increased pollution due to increasing number of lake-dwellers;

- ✓ stoppage of untreated sewage and solid waste from peripheral areas, hamlets and house boats, agricultural return flow from catchment, etc. into the lake;
- ✓ controlling the reduced circulation of lake water due to reduction and clogging of water channels within the lake;
- ✓ improvement of fresh water inflow into the lake;
- ✓ enrichment of the lake water by removal of nutrients to avoid excessive weed growth and adverse changes to the bio-diversity of the lake; and
- ✓ creating a data bank.

The DPR for Dal Lake Conservation and Management Programme was prepared (October 1999) by Alternate Hydro Energy Centre, (AHEC) of the Indian Institute of Technology, Roorkee and submitted (December 2002) to MoEF.

The project of Conservation and Management of Dal Lake was sanctioned (September 2005) by the GOI under NLCP at an estimated cost of ₹ 298.76 crore and targeted for completion in March 2010, subsequently extended to March 2012. The Rehabilitation and Resettlement Programme was approved (May 2001) by the State Government at an estimated cost of ₹ 135 crore revised to ₹ 442 crore in 2007-08. After inclusion of the lake under NLCP, the Authority spent ₹ 308.43 crore during 2005-11.

1.3.8.2 Financial Management

Before the programme was brought under the NLCP, the conservation programme of the Lake was being looked after by the State Urban Engineering Department (UEED) which spent ₹ 72 crore on the development activities of the lake upto 1996-97. LAWDA, after coming into existence, spent a further amount of ₹ 119.43 crore from 1997-98 to the end of March 2005.

The position of funds released and those spent on the project during the last six years after the activities of the Lake were brought under NLCP was as under:

Table 1.3.1

(₹ in crore)

Year	*Opening Balance*	*Funds Received*	*Total*	*Expenditure*	*Closing Balance*	*Under utilization (%age)*
2005-06	11.07	52.12	63.19	43.26	19.93	32
2006-07	19.93	44.00	63.93	34.07	29.86	47
2007-08	29.86	82.54	112.40	44.76	67.64	60
2008-09	67.64	30.50	98.14	55.11	43.03	44
2009-10	43.03	74.01	117.04	67.79	49.25	42
2010-11	49.25	48.94	98.19	63.44	34.75	35
Total		*332.11*		*308.44*		

As can be seen from the table, the implementation of the programme was sluggish in the initial stages of its execution under NLCP as huge funds ranging between 32 and 60 *per cent* remained unutilized during 2005-10. The under-utilization was mainly due to inaction of LAWDA to execute various works like houseboat sanitation, infrastructure development, construction of water tanks in the catchment area, construction of a canal for carrying of fresh water to lake, resettlement of Dal-dwellers etc. The Vice-Chairman (VC) attributed underutilization of funds (September 2011) to unfavourable conditions in the valley, land disputes and non-cooperation of houseboat owners.

1.3.8.3 Preparation of DPR

The State Government in December 2002 approved the DPR which was got prepared by the MoEF through Alternate Hydro Energy Centre (AHEC), Roorkee.

Audit observed that later in December 2003/January and March 2004, LAWDA had pointed out some discrepancies to AHEC. However, it was also noticed that the deficiencies had not been pursued by LAWDA vigorously with MOEF for their effective resolution. It was also seen that phasing of the components of the work to be undertaken under the programme had not been made in the DPR.

The Vice Chairman stated **(S**eptember 2011 that formulation of a comprehensive DPR was a challenge owing to involvement of multiple disciplines associated with it. It was stated that the discrepancies were pointed out to the firm in 2004 but the GOI sanctioned the project in 2005 after evaluating all *pros and cons* which was subsequently given a go-ahead by the State Government. The Authority in view thereof was left with no option but to implement the project.

1.3.9 Implementation

The project included two components viz. 'Lake Conservation & Management Programme' and 'Rehabilitation & Resettlement Programme'. Salient aspects of the programme are:-

a) Lake Conservation & Management Programme

The works under the programme include Sewerage Treatment, Hydraulic Works, Restoration and Development Works, Solid Waste Management, Infrastructure Development and Catchment Management including provision for Land Acquisition and Public Awareness.

b) Rehabilitation & Resettlement Programme

The programme includes resettlement of the dislocated hamlet population in new colonies and acquisition of watery area surrounding the hamlets.

The status of various activities undertaken covered under the programme are enunciated in the succeeding paragraphs.

1.3.9.1 Conservation and Management Programme

The programme includes Sewerage Treatment, Hydraulic Works, Restoration and Development Works, Solid Waste Management, Infrastructure Development and Catchment Management including provision for Land Acquisition and Public Awareness. The status of the works undertaken under various components of the programme is discussed hereunder.

1.3.9.2 Sewerage Treatment Works

Sewerage Treatment Plants (STPs) are designed for removing impurities present in waste water in the form of floating material, suspended solids, bio-degradable organics and pathogens. Six[25] STPs estimated to cost ₹ 21.45 crore were projected to be constructed in the DPR. Out of these, three[26] STPs were taken up in the first phase at a cost of ₹ 9.30 crore. The construction of two STPs (*Brari Nambal* and *Nala Amir Khan*) was under progress as of March 2011 and STP at Hotel Welcome was amalgamated with the one at *Brari Nambal*. Audit check of the execution of this component of the work revealed the following:

- ✓ Despite the doubts expressed by the Ministry of Urban and Poverty Alleviation, GOI over the effectiveness of these treatment plants in cold conditions and the sustainability of their huge maintenance cost, the construction work of the STPs was allotted (August 2004) by LAWDA to M/S Thermax at a cost of ₹ 8.90 crore (Habak: ₹ 2.42 crore, Laam: ₹ 2.82 crore and Hazratbal: ₹ 3.66 core) for completion in nine months. The STP at Hazratbal, Habak and Laam were commissioned in February 2006, April 2006 and October 2006, respectively with time overruns of nine to 17 months.

  Tests of outflow of the two (Hazratbal, Habak) STPs conducted (August 2006) by *LAWDA*, however, showed that despite receiving treatment, the concentration of nutrients present in the waste water had increased at the outflow stage vis-à-vis inflow stage. As already brought out in the report of the Comptroller and Auditor General of India for the year ended March 2006 the percentage efficiencies of the STPs had ranged between 63.39 and (-) 366.3. Further, tests/monitoring (October 2008, March 2009 and January 2010) by the Authority had confirmed the increase in the nutrients at the outflow stage as detailed in ***Appendix-1.2*** which was indicative of the fact that the STPs had not been functioning to the desired levels. Other parameters which define the purity of water too were inadequate and did not match the prescribed norms of the NIT. The position thereof is indicated in ***Appendix-1.3***. The aggregate amount of ₹ 11.05 crore (Habak: ₹ 3.13 crore, Hazratbal: ₹ 4.36 crore and Laam: ₹ 3.56

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[25] Hazratbal, Laam, Habbak, Brari Nambal, Nallah Aaamir Khan and Hotel Welcome

[26] Laam, Hazratbal and Habbak

crore) spent on construction of these three STPs had, thus, proved counter-productive for the health of the lake.

The VC while admitting (September 2011) that Ammonical Nitrogen and phosphorous contents had been found to be inconsistent stated that the firm had been directed to optimise the process to achieve the desired results. No steps had, however, been taken to arrest the problem. The Scientific Advisory Committee (SAC) of LAWDA which was concerned over the functioning of the STPs, decided (June 2009) either to install de-nitrification units for the STPs or create artificial wetlands. The fact remains that the decision to install the de-nitrification plants or creation of the artificial wetlands had to be taken in view of improper functioning of the STPs not provided in the DPR. It was also seen that the firm had also not conducted any internal assessment of the sewage characteristics to modify the design of STPs so as to ensure that the plants were able to function to the desired extent as per agreed terms. The payments made to the firm in view of the stipulation in the NIT regarding payments to be made to the agency after satisfactory performance of the STPs were questionable. The reasons, though called for, were not furnished.

An on-the-spot verification of the three completed STPs showed that sewage collection chambers in all three STPs were without any covering/roof causing air pollution and foul smell. The VC in reply stated that providing of covering /roof was not provided in the NIT/contract and were not required at all. The reply was not acceptable as during a spot visit to the area it was found that the sewage collection chambers were emitting a very foul smell.

Swerage treatment chambers of STPs without covering/roofs.

Keeping in view the environmental concerns of the lake, Audit is of the opinion that a disaster management system should have been in place to overcome the problem that would arise in the event of the STPs becoming non-functional owing to power/machine failure, technical fault, etc. It was, however, seen that no planning was done by LAWDA to meet any such eventuality. In reply the EE while appreciating the audit suggestion stated that steps would be taken in that direction.

1.3.9.3 Intermediate Pumping Stations/Sewer Works/Trunk sewers/re-modeling of drains

To overcome the problems where sewer lines had been laid so low that they could not be relaid from practical or economic consideration, construction of 11 Intermediate Pumping Stations (IPSs) estimated to cost ₹ 18.78 crore was proposed in the DPR. Out of these, only six IPSs had been completed at a cost of ₹ 8.60 crore during the last seven years with physical and financial progress of 55 and 46 *per cent* respectively. No phasing had, however, been included in the DPR *vis-a-vis* completion of the involved components.

Similarly, against 63,000 meters of sewer lines/trunk sewers/remodeling of drains estimated to cost ₹ 35.66 crore, only 49656 meters of sewer lines/trunk sewers/remodeling of drains had been laid at a cost of ₹ 30.25 crore upto March 2011 with physical and financial progress of 79 and 85 *per cent* respectively.

The incompletion of IPSs and Sewer Works/Trunk Sewers/Remodeling of drains had resulted into non-optimal use of installed STPs. The shortfall in execution was attributed by the EE to unrest in the valley, short working season and non-preparation of tender documents for these works by the AHEC which formulated the DPR. It was also stated that the tender documents had been prepared by the LAWDA to ensure completion of the work.

The chances of completion of the Sewer lines/trunk sewers/remodeling of drains within the project period, *i. e.* March 2012, appeared remote, particularly, because in many instances the works had been allotted to contractors without acquiring the land falling in the sewer/drain alignments. Due to this either the works had not been taken up by the contractors or were abandoned after spending huge funds thereon. In one such case {sewer line for sub-zone C01, C02, C03 and C04 of zone 1 (C)}, the contractor after spending ₹ 36.38 lakh on the work abandoned (March 2009) it as the owner of the private property demanded compensation for allowing the passage of the proposed sewer line through his land. In another such instance, construction of sewer line for sub-zone C04, C05, C06 and C07 of zone 1 (C) along Nigeen fringe from RD-1011 to RD-1684 Mtrs could not be taken up for execution by the contractor for the same reason. On this being pointed out, the EE, LD-II stated that the land owners had created hindrance during execution of the work for want of land compensation/non-clearance of land use and that after the land was acquired the contractor asked for escalation or fore-closure of the contract. The contracts were accordingly fore-closed and balance works retendered. The reply of the Authority reflects a casual approach in allotment of works without ensuring availability of encumbrance-free site which is tantamount to improper planning. The Vice Chairman of the Authority stated (September 2011) that the land disputes had been resolved and work was expected to be completed soon.

1.3.9.4 House- to- house connectivity

Construction of lateral sewers for house-to-house connectivity to receive sewage for treatment plants though vital to the programme was not included in the original DPR of Dal Lake Conservation Programme (DLCP). The action of State Government/Authority in not properly evaluating the DPR before accepting it without the vital component of house-to-house sewer besides bringing the casualness of LAWDA to the fore also deprived the State/project of the sustained flow of funds from the GOI. Hence, a separate DPR, estimated to cost ₹ 55 crore, revised to ₹ 60.20 crore, with a target of 77,805 running meters of Secondary/Lateral Sewer/house-to-house connectivity, was framed (2004-05) for funding by the State Government. Against the target, LAWDA had laid 59,973 (77 *per cent*) running meters of Secondary/Lateral Sewer lines at a cost of ₹ 44.70 crore as of March 2011. However, due to inadequate execution of house-to-house connectivity related works, STPs were not receiving the quantum of sewage for which they had been installed resulting in non-optimal use of the sewerage network and STPs so far. Inadequate house-to-house connectivity had also resulted in sewage from households finding their way into the lake**.** Under-utilization of sewerage network and sewerage treatment plants had also been pointed out (July 2009) by the MoEF team.

Water of Houseboats going into the lake

Waste of habitations finding their way into the lake

Houses/Shops constructed in the lake periphery

1.3.9.5 Houseboat Sanitation

Besides, the peripheral area of the lake, human settlements residing within the lake in 1094 houseboats and 2800 *shikaras* and hamlets also contribute to generation of solid and liquid wastes of 4.80 lakh kilograms and 49.91 million litres annually. Though LAWDA undertook a number of experimental projects to rectify the problem prior to NLCP and also spent ₹ 0.70 crore on pilot studies (2005-11) under NLCP, none of the studies could provide any viable solution (March 2011). Despite the omission having been pointed out in the CAG's Audit Report for the year ended 31 March 2006, nothing had been done to arrest the flow of unwanted wastes into the water body.

The team of MoEF (July 2009) also felt concerned and pointed out that the land mass behind the houseboats, used for the housing of the staff, was causing stagnation of water and supporting growth of dense vegetation thereby deteriorating water quality of the lake.

On this being pointed out, the EE, LD-I stated that a decision had been taken to relocate all the houseboats at one place (Dole-Demb area) where they would be provided sewer links for treatment of the waste at the nearest STP. The VC stated that the decision regarding relocation of houseboats at Dole-Demb had been taken by LAWDA on the directions of the Hon'ble High Court, J&K. The VC in his reply, however, refuted the figures brought out in the review and claimed that these were highly exaggerated. The reply was not tenable as the figures brought out in the review were based on the details incorporated in the DPR.

1.3.9.6 Hydraulic Works

With a view to arresting flow of sediments from the *Nallah*s, catchment areas and melting glaciers flowing into the Lake a settling basin had been constructed but a diversion weir had not been constructed. The DPR among other things included construction of diversion works of Telbal *Nallah*, balance works of *Nallah* Amir Khan and extension of Padshahi canal to the lake which had been estimated at ₹ 12.83 crore.

During check of the records related thereto, following significant points came to the notice of Audit.

- ✓ To arrest flow of sediments from entering into the lake, a settling basin had been constructed in 1997-98. It was, however, observed that settling basin had been able to retain sediment load ranging between 42 and 50 *per cent* only as detailed in the table.

Table 1.3.2

Year/Month	*Average inflow of sediment load (mg/l)*	*Average outflow of sediment load (mg/l)*	*Retention of Sediment Load (%)*	*In-efficiency of settling basin (%)*
9/2005 to 8/2006	**153**	**73**	**48**	**52**
9/2006 to 8/2007	**143**	**71**	**50**	**50**
9/2007 to 8/2008	**24**	**12**	**50**	**50**
9/2008 to 8/2009	**17**	**8**	**47**	**53**
9/2009 to 8/2010	**24**	**10**	**42**	**58**

Inadequate capacity of the settling basin to retain the inflowing quantum of sediments from the catchment areas and consequential flow of sediments into the lake beyond the retaining capacity of the basin meant that the decrease in the depth of the lake, increase of nutrients in the lake bed with nutrients and consequential increase in weeds, etc. could not be arrested as envisaged. It was noticed that an inspection team of MoEF had noted (July 2009) that new habitations were coming up in the catchment area especially along the water courses and liquid/solid wastes from such habitations were getting discharged directly or indirectly into the lake thereby, polluting it. Despite knowing to this phenomenon and despite having a full-fledged Enforcement Wing, the Authority had not been able to stop constructions in the catchment area. Reasons therefor, though called for, were not furnished. The VC stated that monitoring of the surface water only was being done initially which conversely should be measured on bed load as well.

- ✓ One of the components included in the DPR under 'balance works' was construction of a diversion weir for the settling basin which would help the settling basin perform better through the gates constructed thereon which would prevent muddy waters from entering the basin during floods. It was noticed that against the approved cost of ₹ 6.17 crore, an amount of ₹ 3.05 crore had been spent with a physical achievement of 99 *percent* as of March 2011. The physical and the financial progress had not been commensurate and it was seen that the expenditure incurred had not proved fully effective due to non-construction of a gate on one of the constructed bays due to which a large part of flood water entered the lake directly instead of through the settling basin as intended. This problem was also highlighted (July 2009) in its report by the monitoring team of the GOI. LAWDA did not reply to the audit observation.

- ✓ To improve water budget of the lake during lean period (June-July) and help flushing of the lake by bringing additional two cums of water per second from Sindh *Nallah* through *Padshahi* Canal to the lake ₹ 2.61 crore had been earmarked in the DPR. After spending ₹ 35.26 lakh between 2003 and March 2008, progress could not be made as the Irrigation Department informed (December 2009) LAWDA that the project was not technically viable. The Monitoring Division of LAWDA also did not find the project viable on the grounds that it carried high load of nutrients of Nitrogen and Phosphorous. As a result, the entire expenditure of Rs.35.26 lakh incurred so far has been rendered wasteful. This was indicative of the fact that the DPR had not been properly evaluated before implementation. No efforts had been made by LAWDA to find an alternate solution, thus, depriving the lake of additional fresh water which could have also helped its flushing.

1.3.9.7 Restoration and Development

One of the components of Conservation and Management Programme was 'Restoration and Development Programme' approved at a cost of ₹49.62 crore. Main activities of the component were dredging of the blocked channels, de-weeding, creation of reed belt, development of shoreline, establishment of aerators and carrying of fresh water from streams to the lake etc. The purpose of these activities was to improve water circulation, increase aesthetic beauty of the lake and further eco-tourism and revenue earnings.

With regard to this component following significant points were noticed.

- ✓ With a view to improving hydrology of the lake for creating a positive impact on the water quality and longevity, the DPR had recommended dredging and deepening of 38 blocked channels in the backwaters of the lake at an approved cost of ₹ 5.81 crore with a physical target of 81833 cum and also dredging and de-weeding of the lake at a cost of ₹ 14.52 crore for completion within the project period. While 22 *per cent* physical and 68 *per cent* financial achievement had been made in dredging in the blocked channels at a cost of ₹ 3.94 crore, the Authority had spent ₹ 16.54 crore on de-weeding/ dredging of the main lake by the end of March 2011. Assessment studies had not been carried out to analyze the impact of dredging and de-weeding on the lake ecology including invasion of species both in the dredged part and the hinterland where the sedimentation had occurred.

  The team of MoEF had also noticed (July 2009) inadequate execution in dredging of channels of the lake and dredging of the lake without bathymetric map (Map that shows basin morphology and helps with identifying areas to be dredged).

  On this being pointed out, the EE attributed (August 2011) the delay in completion of this component to unrest in the valley. Regarding monitoring and evaluation studies it was stated that it was not possible to ascertain the impact of execution at this stage unless all the components of the project were completed. It was further stated that these studies would be conducted in future.

  The expenditure of ₹ 20.48 crore (blocked channels: ₹ 3.94 crore; lake: ₹ 16.54 crore) incurred on this component had so far not led to the desired outcome. The water quality of the lake had not shown any improvement yet, species of local fish had dwindled and exotic species had invaded the lake as discussed in the succeeding paragraphs.

  - With the objective of acquiring land, developing tourist related facilities, raising its means of finances, etc. a component viz. 'shoreline activity' was approved in the DPR at a cost of ₹ 22.04 crore. The Authority had spent ₹ 8.46 crore with financial achievement of only 38 *per cent* during the last over five years under shoreline development which included fencing of the northern foreshore road, landscaping and development of a park and construction of viewing points. The main components viz. clearance of settlements which had grown close to the Northern foreshore, construction of boat club at Telbal, pedestrian Mall at either side of Telbal *Nallah*, roadside Arboriculture, Time share resort, camping sites, craft bazar, mini zoo etc. had not been taken up by the Authority. Given the present scenario, the chances of completion of this component of project by March 2012 seemed remote. The non-completion of the component of work was attributed by the EE to short working season and unrest in the valley.

- Conveyance of fresh water from 57 springs located outside the lake periphery was one of the activities provided in the project and the cost of this activity was estimated at ₹ 2.89 crore. An amount of ₹ 1.57 crore had been spent (financial progress: 54 *per cent*; physical progress of 74 *per cent*) on this activity on 42 springs as of March 2011. No studies had been carried out to ascertain whether these springs actually carried water to the lake or had choked. This aspect was also highlighted (July 2009) by the monitoring team of the GOI in its report.

  In reply the EE, LD-I stated that the issue of analyzing the impact of restored springs would be taken up with the Research and Monitoring Wing of LAWDA. It was also stated that the delay was due to unrest in the valley and that the balance work would be completed within the project period.

1.3.9.8 Catchment Management Works

The main objective of the project was to check soil erosion and degradation process in the catchment area of 33,700 hectares with a perimeter of 93.70 kms (maximum width of 16.70 kms) by reducing inflowing silt load of 60,877 tons per year by 60 to 70 *per cent.* The component was to cost ₹ 25.84 crore. The activity under this component included catchment treatment in identified zones, limiting the building activities in the uphill catchment area, restoration of degraded forests through massive plantation, drainage line treatment through properly designed structures reinforced by vegetative measures, fuel wood and fodder plantation of indigenous and exotic species in State and village common lands, supporting private efforts of raising plantations, forage production through silvi-pasture, pasture development and on-farm fodder development, beneficiary participation through entry point activities, stabilization of quarry area etc.

LAWDA had spent ₹ 14 crore on watershed activities on this component as of March 2011. One of the vital activities of the component was to plant 31.15 lakh plants in 5,545 hectares at a cost of ₹ 8.65 crore. Against this ₹ 2.73 crore had been spent on planting 13.35 lakh plants on 1,563 hectares (physical achievement of 43 *per cent* under plantation and 28 *per cent* under land cover with financial achievement of 32 *per cent*) of the catchment area as per the progress report of LAWDA. In the report submitted by the Project/Watershed Manager, the survival rate of plantation ending September 2011 was placed at 53.71 *per cent*.

To ascertain the impact of plantation on reducing the soil erosion, a silt-monitoring station (SMS)/observatory for gauging runoff had to be launched. No such station/observatory had been launched as of March 2011. In the absence thereof, the inflow of silt from the catchments area and the reduction in the flow of silt into the lake could not be assessed. The team of MoEF also felt concerned over the slow progress of catchment works.

On being pointed out, the Water-shed Manager of LAWDA disputed the figures included by the FA&CO in the progress reports and claimed that target had been achieved up to 75 *per cent* (12.12 lakh against 16 lakh plants). It was also stated that it would take steps to lay SMS at the appropriate time of project completion. The reply was not acceptable as laying of the SMS was a pre-requisite to enable assessment of the impact of treatment meted out to the catchment area by way of plantation etc. for possible mid-term corrections. The VC in his reply put the targets at 16.50 lakh plants on 1500 ha out of which 13 lakh had been statedly planted on 1102 ha which was also at variance with the figures provided by the Watershed Manager. The variation between the three sets of figures was not explained.

1.3.9.9 Evacuation of hamlet population

The Lake Conservation Programme envisaged acquisition of 58 hamlets (over 6000 *kanals*) alongwith 3741 structures erected thereon and restoration of the area so evacuated to the Lake. It was observed that only 1073 *kanals* of land (18 *per cent*) and 592 structures (16 *per cent*) had been acquired (March 2011) at a cost of ₹ 84.19[27] crore. It was also observed that the area had been acquired at isolated spots in a sporadic manner instead of in clusters without demarcation of the acquired land, masses and also, no physical verification was carried out by LAWDA to ensure that the land acquired had not been encroached upon. As a result, despite spending ₹ 84.19 crore, the programme objectives could not be achieved in full rendering the expenditure largely unfruitful. The omission had also been pointed out in the CAG's Audit Report for the year ended 31 March 2006.

The EE, LD-I attributed it to non-settlement of compensation with the lake-dwellers under private negotiations. The reply was not acceptable as in a huge number (66 test-checked) of cases, though the mutations/sale deeds and acquisition of land had taken place yet payments had not been made to the lake-dwellers.

[27] Includes expenditure incurred prior to inclusion of lake under NLCP (NLCP expenditure: ₹ 53.62 crore)

1.3.10 Rehabilitation and Resettlement Programme

The programme includes resettlement of the dislocated hamlet population in new colonies and acquisition of watery land surrounding the hamlets. Against the availability of ₹ 191.60 crore for the component, the total amount spent was ₹ 157.23 crore during 2005-11 and the unspent balance was ₹ 34.37 crore at the close of March 2011. The status of the activity is given in the succeeding paragraphs.

- ✓ The rehabilitation programme related to Dal Lake Conservation and Management Project envisaged relocation of Dal-dwellers residing in hamlets within the lake. The programme aimed at rehabilitation of about 6,000 families residing aboard 58 hamlets (1999) within the lake body. The number of families had subsequently (July 2005) increased to 11,000. The State Government had approved (May 2001) the project for ₹ 135 crore, revised (September 2005) to ₹ 264.85 crore and further revised (2006-07) to ₹ 442.70 crore. To relocate the affected people, land measuring 581 *kanals* was acquired upto October 2003 by LAWDA at *Guptaganga* and *Chandpora* at a cost of ₹ 8.32 crore. The land was, however, not allotted to the Dal-dwellers as these sites were shown to be green belt areas in the Master Plan of Srinagar city. Though proceedings for change of land-use were initiated time and again, the cabinet did not approve the change. The State cabinet approved (October 2008) the change of land-use from restricted open land to tourist and residential activities after a lapse of more than four years. Improper planning of LAWDA to ascertain the genuineness of the use of the land prior to its acquisition and delayed decision of the State Government to change land-use had rendered the expenditure of ₹ 8.32 crore unfruitful, besides adversely affecting the rehabilitation and resettlement programme of the lake dwellers. The land in question had not been put to fruitful use so far.

  Before the decision regarding the land-use could be taken, the State Government had transferred 7,526 *kanals* and 7 *marla* of land at *Rakh-i-Arth*, Budgam to LAWDA in April 2006. The colony was proposed (March 2008) to be developed at a cost of ₹ 402 crore in a phased manner. In the first phase, 3,000 *kanals* of land was decided to be developed to accommodate 4600 families.

  LAWDA had, however, taken possession of only 494 *kanals* (out of 7526 *kanals*) of land at a cost of ₹ 34.68 crore (includes payment to *Kamas*, development charges etc.) as of March 2011. Besides, the environmental impact assessment (EIA) study of the area on which Dal-dwellers were to be relocated was also pending. All the components of the project had to be implemented simultaneously as per the DPR but had not been done. Evidently, LAWDA was not able to rehabilitate Dal-dwellers since the implementation of the Dal-lake Conservation and Rehabilitation Programme. Thus, the purpose of the project had been defeated as the sewage of these inhabitants had continued to be discharged directly into the lake body. The team of MoEF had also pointed out that the rehabilitation project was moving at a slow pace.

Land acquisition

The Dal dwellers had propriety rights of watery land within the lake. To prevent the dislocated dwellers from returning to the lake and filling up this watery land for residential/agricultural purposes, it was proposed (January 1999) to acquire 14,547 *kanals* of watery area under the Rehabilitation Programme. However, against the target of acquiring 14,547 *kanals*, only 3907 *kanals* (27 *per cent*) had been acquired as of March 2011. It was also observed that the area had been acquired at isolated spots instead of in clusters without demarcation of the acquired land masses and also no physical verification was carried out by the Authority to ensure that land acquired had not been encroached upon. As a result, despite spending ₹ 40.71 crore, the programme objectives had not been achieved in full rendering the expenditure largely unfruitful. The omission had also been pointed out in the CAG's Audit Report for the year ended 31 March 2006. The team of MoEF (December 2010) had also felt concerned over the slow progress in this particular component. In reply, the EE stated that the land would be acquired in clusters and matter of demarcation and physical verification would be taken up with the field staff.

The fallout of non-completion or partial completion of the components of the conservation and rehabilitation programmes had been manifold as brought out hereunder.

✓ ***Entrapping of phosphorous and inorganic nitrogen***

156.62 tonnes of phosphorus and 241.18 tonnes of inorganic nitrogen flows into the lake annually as part of sewage, soil from erosion, agricultural back flows, etc. from non-point/point sources out of which about 80.62 tonnes of phosphorus and 109.22 tonnes of inorganic nitrogen leaves the lake, mainly through two outlets, resulting in entrapping of about 76 tonnes of phosphorus and 131.96 tonnes of inorganic nitrogen in the lake annually. The gradual increase in the levels of nutrient load meant accelerated eutrophication of the lake and was an issue of foremost concern. LAWDA had not carried out any studies to assess the impact of eutrophication or set up formal mechanism for regular monitoring of such eutrophication.

✓ ***Dwindling of local fish species***

It was seen that notable fish species common in the Lake like schizothoraxe socinus, s. niger, s. curvifons, s. micropogon, labeodera, carassius carassius had decreased sharply over the last thirty years and had since been outnumbered by carpiodes. It was further seen that the two fish species, viz. cyprinus carpio specularis and c. carpio communis, introduced in 1956 had got well established as they thrived in waters rich in nutrients and organic matter. The Ex-Director of Research and Monitoring Laboratory had researched that the fish catch of Dal Lake comprise more than 80 *per cent* of the introduced carp.

The decline in fish diversity and yield was attributed to the changes in hydrological regime and loss of critical habitats and heavy loads of incoming sewage which had led to increased eutrophication with adverse impact on growth and development of sensitive fish species.

- ✓ ***Invasion of exotic species***

Azolla, the exotic species of weed was a new invader that had consumed the greater area of the lake causing significant changes to its vegetation pattern. The prolific growth of azolla was attributed to unabated inflow from effluent channels and drains, raw sewage and enrichment of sediments particularly due to heavy load of organic nitrogen and phosphates.

1.3.11 Infrastructure

A provision of ₹ 15.93 crore had been sanctioned for creation of infrastructure facilities for the Project viz. establishment of buildings for Authority, its laboratory, purchase of equipment, installation of captive power plant, etc.

Despite the provision for establishment of office building, LAWDA had continued to house its offices in rental accommodations paying huge rent annually thereby resulting in avoidable expenditure of ₹ 0.47 crore from September 2003 to June 2010. Utilization of money on payment of rent out of the funds meant for creation of infrastructure is tantamount to diversion of the project funds. The VC attributed it to non-availability of suitable land.

The team of MoEF had pointed out (July 2009) that equipping the Authority with the needed infrastructure was the basic requirement for effective implementation and monitoring of works and for evaluating the status of the lake, as also for undertaking research that was considered necessary for management of interventions. The team had noticed meager expenditure under infrastructure facilities and had further noticed that the laboratory of LAWDA which earlier had its own building was housed in a small rented space which was ill-furnished, ill-equipped and poorly staffed. The team had concluded that unless the infrastructure was provided, it was neither possible to implement the scheme properly nor undertake regular field works for collection of samples for physico-chemical analysis and monitoring. Audit noticed that not much progress had been achieved in this regard.

1.3.12 Human resources development

Human resource management is one of the basic ingredients for an organization to run efficiently and effectively. It was, however, seen that human resources development by means of training and capacity building had not been undertaken by LAWDA fully as prescribed in the DPR. The organizational set-up as proposed in the DPR for LAWDA had not been replicated by the State Government. Except for the appointment of a Chief Executive Officer, though not of the rank prescribed in the DPR, none of the five Directors had been appointed in the Authority to oversee various components/activities of the project work as the rules regarding service of the employees were pending approval of the State Government. The laboratory of LAWDA had remained head-less during the entire period of NLCP. Also, the LAWDA-borne staff had stagnated for nine years or more and not given in-situ promotions despite a decision having been taken by the Board. Training programmes were also not conducted for the staff to handle/run equipment such as STPs etc. The VC stated that draft recruitment rules and the issue of in-situ promotions to the employees were under consideration in the Administrative Department.

1.3.13 Monitoring

Effective monitoring at all stages of execution of a project is essential for carrying out mid-term corrections and for overall progress in the intended direction. It was, however, seen that the monitoring mechanism was non-existent which had resulted in non-completion of the project and also ineffective functioning of the components of work already executed. The position of monitoring system available or lack of it is brought out hereunder.

Monitoring by State Level Monitoring Committee

The implementation of the project was to be monitored by the State Government and the GOI. A Monitoring Committee was to be set up to monitor and evaluate the work done on quarterly basis i.e. four times a year starting September 2005. The committee had met only once (January 2007) against 22 meetings due to be held between September 2005 and March 2011. This had resulted in non-monitoring and non-evaluation of the work done under the project and consequential impairment in the implementation of the project.

Monitoring by Scientific Advisory Committee

A Scientific Advisory Committee was to be constituted to oversee various aspects like aquatic ecology, hydrobiology, environmental engineering, chemical engineering, hydraulic engineering/hydrology, watershed management, economics, sociology, etc. The Committee was to meet periodically, at least twice a year (i.e. at least 11 times from September 2005 to March 2011`), to assess the impact of the various ongoing measures taken by Authority in implementation of the Dal Lake Conservation Programme. The

Committee had met only twice since September 2005 which had led to non-monitoring of the project.

- ✓ ***Board of Directors***

  The Board of Directors which had to meet at least 18 times during 2005-10 to take policy, strategic and tactical decisions about implementation of the programme had met only six times. Inadequate Board oversight had also contributed to poor execution of the project.

  The reply of LAWDA that the meetings could not be held due to busy schedule and pre-occupation was not acceptable as lack of monitoring of the project had contributed to its remaining incomplete in respect of most of its components. The likelihood that all components would be complete by the end of the year 2012 seemed remote.

1.3.14 Internal Controls

Proper internal control mechanism in an organization is essential for smooth implementation of various programmes undertaken by it. Existence or otherwise thereof adversely affects the day to day activities of the organization. The review of the organization of Authority showed inadequacies in controls as brought out hereunder.

- ✓ Despite M/S Thermax having defaulted by not executing the work on the three STPs to the specifications of the conservation programme, it was allotted (August 2009) the work of the remaining two STPs under the programme with a different technology (SBR) at an aggregate cost of ₹ 34.64 crore. It was seen that although M/S Thermax had originally offered its rates for 'Moving Bed Bio Reactor (MBBR)' technology, yet the State Contract Committee negotiated the rates with the firm for 'Sequencing Batch Reactor (SBR)' technology after opening of the financial bids of three firms instead of negotiating the rates with the firm (ION Exchange) which had offered the rates for SBR technology. It was also seen that the Authority had opened financial bids prior to technical evaluation of each tenderer which contravened the basic tenets of tendering.

  On this being pointed out , the Financial Advisor and Chief Accounts Officer (FA & CAO) of the Authority stated that M/S ION Exchange had been requested vide a series of letters to match the price offer with that of the lowest tenderer M/S Thermax (who had offered for MBBR technology). The reply was not acceptable as the former had requested for negotiating the rates but the authority had not responded to its pleadings.

  It was further seen that the firm had been paid interest-free mobilization advance (₹ 3.35 crore) and material (₹ 2.26 crore ended December 2010) on credit basis though the terms did not contain such provisions, thereby extending undue favour to the firm. On this being pointed out, the FA & CAO stated that no interest is to be levied on mobilization advance under the State Public Works Accounts Code. The reply was not tenable as provision for payment of such advance to contractors does not exist in the State Public Works Accounts Code. However, the payment of such advance has been defined in the Central Public Works Accounts Code which envisages levy of interest on such advances. As regards issue of material on credit basis, it was stated that the practice would be stopped in future. Issue of material on credit basis so far was not, however, explained.

✓ ***Submission of monthly progress reports***

Progress reports regarding implementation of the project were required to be submitted to the GOI and the State Government on quarterly basis. Delays of up to 38 days were, however, observed in submission of progress reports to MoEF/State Government. Besides, nine monthly progress reports were not sent to MoEF and State Government respectively. Progress reports prior to April 2007 had either not been sent to the GOI/State or the same had not been prepared**.**

✓ ***Allotment of works without invitation of tenders***

Allotment of works for execution without ascertaining the reasonability of rates is prohibited under the State Financial rules. The Authority without resorting to proper tendering process as required under rules had allotted works amounting to ₹ 1.01 crore to contractors in violation of rules.

✓ ***Diversion of funds***

Despite the fact that the GOI had categorically laid down in the sanction order that the cost of operation and maintenance (O&M) should be borne by the State Government, the Authority had spent ₹ 4.84 crore on this component leading to diversion of programme funds. The reasons for the violation, though called for, were not assigned.

✓ ***Adjustment of advances***

An amount of ₹ 37.41 crore had been advanced to various agencies/departments during 2005-11 for procurement of material/execution of various works. The advances were debited to the final head of account without obtaining adjustment account therefor. This had resulted in inflation of expenditure and consequently understatement of balances. In reply it was stated by the EE that action would be taken after reconciling the figures.

✓ ***Unclaimed deposits***

Deposits which remain unclaimed for over three years are required to be transferred to Misc. Revenue as per the State Public Works Accounts Code. Notwithstanding this LAWDA continued to hold the deposits of CDRs/bills of ₹ 0.54 crore (Test-checked cases) in its accounts without actually transferring them to the revenue of LAWDA. The VC stated that action as warranted under rules would be taken.

✓ ***Undue financial aid***

Despite incorporation of a specific condition in the NIT regarding issuance of material to the contractors on cash-basis, the Authority continued to issue key construction material to the contractors on credit-basis which was tantamount to undue financial aid to contractors. The amount of such undue financial aid involved in the test-checked cases alone stood at ₹ 2.80 crore. The EE stated that the material was being issued departmentally for maintaining the quality control. The reply, however, did not contain the reasons for issuance of the material on credit-basis.

✓ ***Obtaining of sales tax/VAT clearance certificate***

The conditions incorporated in the supply orders stipulate production of sales tax/VAT clearance certificates of the Sales Tax Department from the suppliers before making payment for the supplies made. Authority had in contravention of the same paid ₹ 4.12 crore to the suppliers without the requisite certificates. The EE stated that instructions had been noted for compliance.

✓ ***Non-finalization of accounts***

In terms of Section 21 of the Jammu and Kashmir Development Act, 1970, LAWDA is required to prepare annual accounts in consultation with auditor to be appointed by the Government. LAWDA, despite having a full-fledged Accounts Wing had neither prepared its accounts nor engaged Chartered Accountants to prepare the annual accounts. LAWDA had not even prepared the accounting manual nor prescribed the accounting procedures to be adopted by it. In the absence thereof, the financial position and details of assets/liabilities of Authority could not be ascertained. Non-preparation of accounts had exposed the organization to the risk of financial irregularities/frauds going undetected. The VC stated that a Chartered Accountant had been engaged for preparation of Annual Accounts.

✓ ***Excess payment***

The amount of ₹ 11.05 crore paid to M/S Thermax for construction of STPs (paragraph 1.3.9.2) included an excess payment of ₹ 30.83 lakh. On being pointed out, the EE stated that the payments had been made by the Head Office. The reply of the division was not acceptable as the payments had been made by the Head Office after due verification of the contractors bills by the EE.

1.3.15 Effectiveness of the programme

A comparative position of indicators defining the health of the lake at various points of time, before embarking upon the conservation programme and during 2010-11, is tabulated hereunder.

Table 1.3.3

Year	*1996-97*	*2005-06*	*2010-11*	*Variation during review period*
PhValue	NA	8.0	7.9	(-) 0.1
Dissolved Oxygen	8.6	6.1	6.2	(+) 0.1
Nitrate Nitrogen	272	572	418	(-) 154
Ammonical Nitrogen	362	319	126	(-)193
Ortho-phosphate	135	105	178	(+) 73
Total Phosphorous	768	360	485	(+) 125
Chemical Oxygen Demand (COD)	NA	25	32	(+) 7
Bioligical Oxygen Demand (BOD)	NA	NA	13	-

Increases in the parameters defined in the table and reduction in dissolved oxygen content is detrimental to the health of the lake. As can be seen from the table, though Nitrogen Nitrate and Ammonical Nitrogen components have come down, the other components have increased to the detriment of the quality of water leading to excessive vegetation.

The drastic change in the water quality was attributed to intensified release of nutrients due to soil erosion, run-off from catchment area and discharge of urban wastes including inorganic fertilizers. The increase in the value of total dissolved solids indicated continued siltation, failure of retention of silt by settling basin and high ingress of sewage into the lake and mineralization process of organic matter. This indicated that multi-pronged approach to conserve and manage the lake had been neither effectively implemented nor properly monitored for the desired outcomes.

1.3.16 Wular Lake Conservation Programme

The WularLake Conservation Programme had been recently included in the NLCP. A Conservation and Management Programme for the lake had been prepared (Forest Department) and submitted (2007) to the MoEF at an estimated cost of ₹ 386.39 crore against which the 13th Finance Commission had recommended ₹ 120 crore for the current five year plan with year-wise allocation of ₹ 30 crore starting from the year 2011-12. The State had not established any authority as yet for implementation of the programme.

1.3.17 Conclusion

The State Government had not conducted any survey of lakes for source water protection. No nodal agency was formulated for the overall formulation, implementation and co-ordination of the comprehensive programme for pollution control in lakes. DPR for conservation of Dal Lake had not been prepared after exhaustive study and had been accepted without proper evaluation. Sub-optimal performance of the STPs, partial working of settling basin, non-completion of house-to-house connectivity for carriage of sewer, non-construction of gates, etc. for the bays had resulted in increase in the nutrients and weeds and depletion of the fish population in the lake. No studies had been carried out to ascertain whether the springs existing in the lake were actually carrying water to lake or had choked. No adequate planning existed for re-settling Dal-dwellers despite spending huge amount on this count.

1.3.18 Recommendations

- ✓ ***The State Government needs to appoint a nodal agency to coordinate planning and implementation of the programmes for all the water bodies in the State.***
- ✓ ***LAWDA needs to have a well-functioning and adequately empowered PMC, State Level Monitoring Committee, Scientific Advisory Committee and Board.***
- ✓ ***LAWDA needs to have a well-documented accounting system in place for efficient financial management of the programme to prevent occurrence of any frauds.***
- ✓ ***House-to-house connectivity and houseboat sanitation needs to be given priority so that the wastes from the areas outside and inside the lake do not enter the lake.***
- ✓ ***Dredging of the blocked channels, de-weeding, creation of reed belt, development of shoreline, establishment of aerators and carrying of fresh water from streams to the lake need to be done on scientific lines for stopping degradation of the lake.***
- ✓ ***Rehabilitation and resettlement programme of the lake-dwellers needs to be given top most priority.***
- ✓ ***With a view to making the Authority a self-sustaining organization as per the provisions of the DPR, all the activities undertaken in and around the lake needs to be transferred to LAWDA.***

POWER DEVELOPMENT DEPARTMENT

1.4 POWER DISTRIBUTION UTILITIES IN JAMMU AND KASHMIR

1.4.1 Introduction

The distribution system of the power sector constitutes the final link between the power sector and the consumer. The efficiency of the power sector is judged by the consumers on the basis of performance of this segment. As this sector has been incurring huge losses, the real challenge of reforms in the power sector lies in efficient management of the distribution system. The National Electricity Policy (NEP) aims to bring about reforms in the Power Distribution sector through system upgradation; control and reduction of T & D losses and power thefts; and making the sector commercially viable, besides adopting appropriate financing strategy to generate adequate resources. It further aims to bring out conservation strategy to optimize utilisation of electricity with focus on demand side management and load management.

The responsibility for distribution of power in Jammu and Kashmir State vests in the J&K Power Development Department which functions under the administrative control of Commissioner/Secretary to the J&K Government, Power Development Department. The day-to-day operations of the department are carried out by the Development Commissioner Power (DCP), J&K State who is assisted by two Chief Engineers, Electric Maintenance and Rural Electrification (EM&RE) Wing, Jammu and Srinagar. The Chief Engineers are assisted by twelve Superintending Engineers (Jammu: 5, Srinagar: 6 and Leh: 1), who act as circle heads. There are 45 Electric Divisions (Jammu: 19, Srinagar: 24 and Leh: 02) each headed by an Executive Engineer under the control of Superintending Engineers in the State. During 2006-07, 4,031 MUs of energy was sold by the Department which increased to 4,041 MUs during 2010-11 recording a minuscule increase of 0.25 *per cent* over the period 2006-11. As on 31 March 2011, the Department had distribution network of 85,631 CKM (HT lines: 27,532 and LT lines: 58,099), 34,682 sub-stations of various categories in 27 out of 31 EM&RE Divisions. The number of consumers in 27 divisions (Kashmir: 15; Jammu: 12) visited by audit was 11.39 lakh as on 31 March 2006 which had grown by nine *per cent* to 12.42 lakh as of March 2011.

A performance review on the working of the Power Distribution in the State was conducted with a view to ascertaining whether it adhered to the aims and objectives stated in the National Electricity Policy and Plan and achieve the proposed distribution reforms.

A performance review on Accelerated Power Development Reforms Programme (APDRP) was included in the Report of the Comptroller and Auditor General of India, Govt. of J&K for the year ended 31st March 2006. The Report was discussed by PAC in June 2007. The PAC gave its part recommendations in its 48th Report (March 2010).

1.4.2 Scope and Methodology of Audit

The present performance audit conducted during April and June 2011 covered the performance of the Department during the period 2006-07 to 2010-11. The review mainly deals with Network Planning and Execution, Implementation of Central Schemes, Operational Efficiency, Billing and Collection efficiency, Financial Management, Consumer Satisfaction, Energy Conservation and Monitoring. The audit examination involved test check of records of 14 utility divisions[28] out of the total of 45 divisions, besides DCP and two Chief Engineer's Offices. The utility divisions were selected on random sampling basis whose annual audit had not been conducted during the period immediately preceding 12 months. Besides, data on various activities viz., consumer base, transformation capacity, connected load, substations, HT/LT Line spread etc were collected from 15 more EM&RE divisions[29] (making a total of 27 out of 31 EM&RE divisions) for analysis.

The methodology adopted for attaining the audit objectives with reference to audit criteria consisted in explaining audit objectives to top management, scrutiny of records at Head Office and selected units, interaction with the auditee personnel, analysis of data with reference to audit criteria, raising of audit queries, discussion of audit findings with the Management and issue of draft review to the Management for comments.

1.4.3 Audit Objectives

The objectives of the performance audit were to assess whether:

Network Planning and execution

- plans were made to develop, maintain and augment the distribution network systematically, to provide reliable and quality power supply for all by 2012 as per the prime objective of the NEP;

Implementation of Central Schemes

- the central schemes such as, Restructured Accelerated Power Development Reform Programme (RAPDRP) aimed at bringing about improvement in the urban distribution sector and Rajiv Gandhi Grameen VidyutikaranYojna (RGGVY) were implemented efficiently and effectively.

Operational Efficiency

- the distribution work exists for reliable, safe and quality supply of power and is capable of meeting the power demand of the consumers in the State; and

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[28] EM&RE Divisions: Anantnag, Awantipora, Bararmulla, Batote, Bijbehara, Handwara, Poonch, Rajouri, Reasi, I-Srinagar, Sopore and Udhampur; STD Divisions: II-Srinagar and Sopore

[29] EM&RE Divisions: Budgam, Doda, V-Ganderbal, I-Jammu, II-Jammu, III-Jammu, Kathua, Kishtwar Kulgam, Pulwama, II-Srinagar, III-Srinagar, IV-Srinagar, Sumbal and Vijaypur

- ❖ proper and timely repairs and maintenance were carried out to the distribution systems (sub-station transformers, meters and lines) to prevent disruption in power supply.

Billing and Collection Efficiency

- ❖ electricity bills were generated promptly; and
- ❖ Collection of revenue from consumers was efficient and effective.

Financial Management

- ❖ the fund management was effective
- ❖ Annual Revenue Requirement (ARR) was filed in time and tariff revised.

Consumer Satisfaction

- ❖ a system is in place to assess consumer satisfaction and redress grievances; and

Energy Conservation

- ❖ the loss reduction techniques and energy conservation measures were undertaken in line with the National Electricity Plan (NEP); and
- ❖ the concept of energy audit was in place.

Monitoring

- ❖ there is a monitoring system in place and the same is utilised in review of ongoing projects, corrective measures to overcome the deficiencies are taken properly and whether there is adequate response to Government audit/Internal audit observations.

1.4.4 Audit Criteria

The audit criteria adopted for assessing the achievement of the objectives were:

- ❖ Guidelines issued by the GOI regarding implementation of APDRP, Rural Electrification Corporation (REC), RGGVY and R-APDRP.
- ❖ Guidelines of committee of experts for planning, implementation and monitoring of projects.
- ❖ Various MOAs and MOUs executed between Central and State Governments.
- ❖ Directives of SERC for reduction of T&D losses and revenue realization.
- ❖ State Financial Rules

1.4.5 Power Revenue and Expenses

The Department draws electricity from three sources for distribution to the consumers in the State. The main sources of energy for the Department apart from self-generation are purchases from State-owned Power Development Corporation and the Central

Government PSUs. The main sources of revenue are the sale of power to the consumers and other miscellaneous receipts like fee, fines, etc.

The position of departmental expenditure (including power purchase), revenue realisation and budgetary support from the State to make good the deficiency during 2006-11 is given in the following table.

Table 1.4.1

(₹ in crore)

Year	Total expenditure on distribution (including power purchase)	Total Income including sale of power	Difference Budgetary support	Budgetary support (*per cent*)	Energy Sold (MUs)
2006-07	1,926	395	1,531	79	4,030.84
2007-08	2,335	594	1,741	75	3,331.64
2008-09	2,270	630	1,640	72	3,538.70
2009-10	3,141	704	2,437	78	3,833.00
2010-11	3,383	1,053	2,330	69	4,041.00

It can be seen from the above table that the Department is heavily dependent upon the budgetary support from the State Government to provide electricity to the population in the State. An analysis of the data revealed that for every unit of energy supplied to the consumers by the Department during 2010-11, the State had spent an amount of ₹ 5.77 from its budget.

1.4.6 Audit Findings

An entry conference was held with the Development Commissioner (Power) on 22nd February 2011. Subsequently, audit findings were reported to the Department and the State Government in September 2011 and discussed in an 'Exit Conference' held in October 2011, attended by the Development Commissioner Power (DCP) J&K. The views expressed by the Departmental officers have been considered while finalising this Review. The audit findings are discussed in subsequent paragraphs.

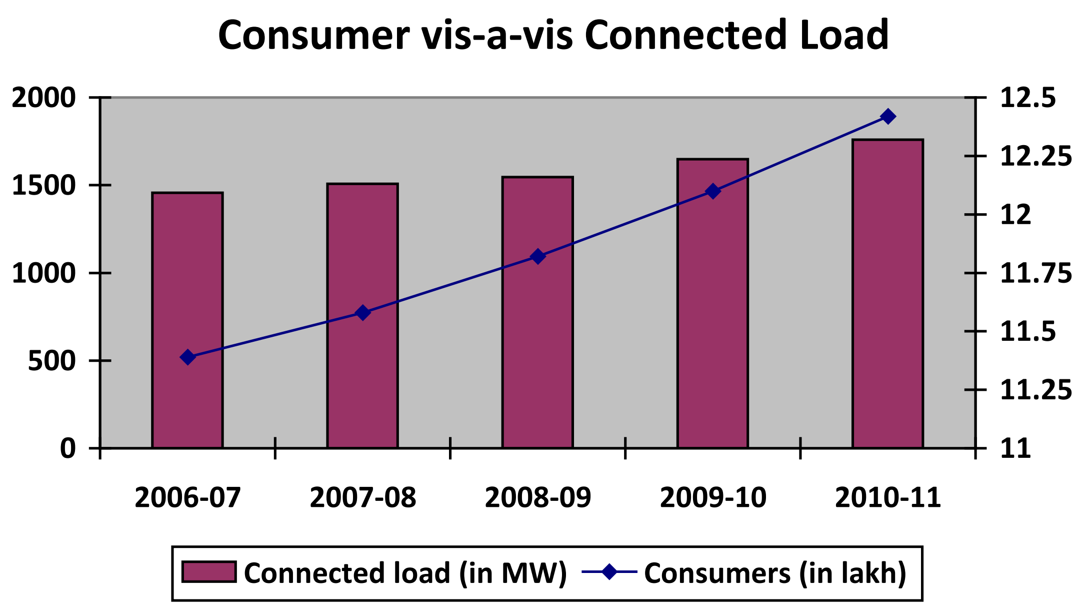
1.4.7 Distribution Network Planning

The Department was required to prepare a long-term plan and annual plans for creation of infrastructure facilities for efficient distribution of electricity to the maximum possible population in the State. Besides, the upkeep of the existing network, additions to distribution network were required to be planned keeping in view the demand/connected load, anticipated new connections and growth in demand based on Electric Power Survey. Capital Investment Plans were required to be submitted to the State Government/SERC after considering the physical parameters. The major components of the outlay were to include outlays for normal development and system improvement besides rural electrification and strengthening of IT enabled systems.

It was, however, observed that annual plans based on the above parameters had not been prepared. Instead, works were executed on individual demands in an indiscriminate manner leading to situations of distribution transformers being installed in disregard to power availability and connected load in a particular area. Indiscriminate capacity additions had resulted in increased energy misuse and overload at receiving and grid stations. Non-existence of proper planning was brought (May 2010) to the notice of the Chief Engineer, EM&RE Wing, Srinagar by the Deputy Director of his planning wing and was accepted by the Commissioner /Secretary, PDD in a meeting held (February 2011) under the chairmanship of Finance Minster.

The particulars of consumers and their connected load based on the information collected by audit from 27 out of 31 field divisions (EM&RE) during the review period are given below in bar chart.

Chart-I



(Source: Data collected from 27 out of 31 field divisions)

While the system improvement and rural electrification schemes have been dealt with separately under subsequent paragraphs, the particulars of distribution network planned and achieved in 27 out of 31 EM&RE Divisions are depicted in ***Appendix-1.4***. It may be seen from the appendix that against the planned addition of 10,515 sub-stations over the review period, only 8,296 sub-stations were actually added. Further, alongwith the growth *(*21 *per cent)* of connected load of 1,456.98 MW in 2006-07 to 1,759.82 MW (equivalent to 2,199.78 MVA at 0.80 Power Factor) in 2010-11 as depicted in the graph, the increase in transformer capacity from 4,322.09 MVA to 5,066 MVA (17 *per cent*), despite existing excess transformation capacity as highlighted in paragraph 1.4.10.3. The increase in distribution capacity had not matched the pace of growth in the consumer-base.

Audit noticed huge variation between figures of connected load supplied by the Development Commissioner, Power and those collected by Audit from the field units. As per the figures supplied by the Commissioner, the connected load for the State as a whole, as of March 2011, was only 1,589.05 MW (1,986.32 MVA[30]) which was far less than the load arrived at by Audit on the basis of figures collected from 27 divisions only and depicted in the graph above. Reasons for the mismatch though called for were awaited (September 2011).

1.4.8 Implementation of Centrally Sponsored Schemes

1.4.8.1 Rural Electrification

The National Electricity Policy lays down the key objective of development of power sector as supplying electricity to all areas including rural areas through joint efforts of the GOI and the State Governments. Accordingly, the *Rajiv Gandhi Grameen Vidyutikaran Yojana* (RGGVY) was launched in April 2005, with the aim of providing all households access to electricity in five years. Under RGGVY, the GOI provided 90 *per cent* capital subsidy.

In August 2006, the GOI notified the Rural Electrification Policy (REP) which, *inter-alia*, aimed at providing all households access to electricity by 2009 and Minimum consumption of one unit per household per day as a merit good by the year 2012. The other RE schemes viz., Accelerated Electrification of one lakh villages and one crore households and Minimum Needs Programme were merged into RGGVY. The features of the erstwhile '*Kutir Jyoti Programme*' were also suitably integrated into this scheme.

As on 31 March 2006, out of 6,652 villages in the State (as per 2001 Census), 6,268 (94 *per cent*) villages were electrified.

As per guidelines, the State Government had to implement the projects through State Power utilities or Central Public Sector Undertakings on turnkey basis as per the prescribed procurement and bidding conditions and execution of each project had to be completed within a period of two years.

It was seen that 14 projects covering the entire J&K State were sanctioned between 2005-06 and 2008-09 by REC at a cost of ₹ 821.62 crore for completion by the end of March 2010. Under these projects 3,03,682 rural household connections were proposed to be provided. This included 96,381 BPL households earmarked to be electrified free of cost and 12,530 already electrified villages/hamlets for intensive electrification. The execution of the projects in 14 districts was entrusted to NHPC Ltd. (7 districts)[31] and JKPDC (7 districts[32]).

[30] At 0.80 Power Factor

[31] Budgam, Jammu, Kargil, Kathua, Leh, Srinagar and Udhampur

[32] Anantnag, Baramulla, Doda, Kupwara, Poonch, Pulwama and Rajouri

The coverage of Rural Household connections including BPL households during the last five years was as under:-

Table 1.4.2

Target No. of HH to be electrified including BPL HH ending March 2011	Cumulative achievements including BPL HH ending March 2011	Coverage *(percent)*	Shortfall *(percent)*
3,03,682	29,742	10	90

(Source: Data furnished by the Planning Wing of PDD, HH: Household habitations)

Huge shortfall of 90 *per cent* despite spending ₹ 499.69 crore during the last five years ending March 2011 indicated that the main objectives of the programme to provide access to electricity to all households within the stipulated time frame including coverage of all BPL households in all Rural habitations could not be achieved.

1.4.8.2 The achievements of the two implementing agencies viz., NHPC and JKPDC at the district level are depicted in following table.

Table 1.4.3

District	Target			Achievement			Shortfall *(percentage)*		
	Un-electrified/ de-electrified villages/ hamlets	Intensive electrification in already electrified villages/ hamlets	HH	Un-electrified/ de-electrified villages/ hamlets	Intensive electrification in already electrified villages/ hamlets	HH	Un-electrified/de-electrified villages/ hamlets	Intensive electrification in already electrified villages/ hamlets	HH
Executing Agency: NHPC									
Srinagar	311	711	9,212	3	27	1,488	99	96	84
Budgam	1,427	591	10,135	0	0	0	100	100	100
Leh	171	224	6,909	20	1,965	1,780	88	-	74
Kargil	145	559	1,614	11	585	585	92	-	64
Jammu	1,375	5,530	36,697	0	1,134	6,314	100	79	83
Kathua	648	1,644	31,632	122	1,522	6,461	81	7	80
Udhampur	1,363	1,945	59,357	35	747	11,136	97	62	81
Executing Agency: JKPDC									
Baramulla	194	0	15,994	0	0	0	100	100	100
Pulwama	352	0	20,606	0	0	0	100	-	100
Kupwara	229	332	8,099	74	74	555	68	78	93
Anantnag	601	600	27,016	309	0	1,423	49	100	95
Rajouri	962	158	41,092	0	0	0	100	100	100
Poonch	276	104	7,288	0	0	0	100	100	100
Doda	275	132	28,031	0	0	0	100	100	100
Total	**8,329**	**12,530**	**3,03,682**	**574**	**6,054**	**29,742**	**93**	**52**	**90**

(Source: Data furnished by the Planning Wing of PDD, HH: Household habitations)

Evidently the pace of implementation of the projects has been tardy with huge areas yet to be covered. There was 'nil' achievement against the targets in case of Baramulla, Pulwama, Doda, Rajouri and Poonch districts despite allotment of funds during 2009-10 and 2010-11. Year-wise details of coverage of households including BPL households under RGGVY by the implementing agencies (NHPC and JKPDC), though called for (August 2011), were not intimated (September 2011). Apart from this, inherent contradiction existed in the data furnished by the planning wing of the Department depicted in the above table. As can be seen against the target coverage of 224 and 559 villages/habitations under intensive electrification in Leh and Kargil respectively, the achievements shown were much higher at 1,965 and 585 villages/hamlets. Reasons for such variation, though called for (October 2011), were not furnished. The discrepancies in the data render the claim of achievements doubtful.

Further, despite signing tripartite and bipartite agreements with the NHPC and REC by the Development Commissioner (Power) of the State PDD on 9th September 2005, neither had any franchisee been engaged for management of the rural distribution network nor any project completed within the implementation period of two years indicating unsatisfactory implementation of all the sanctioned projects. This meant that the State Government was liable to lose not only the benefit of 90 *per cent* capital subsidy but also repay the loan alongwith interest.

1.4.8.3 Project Funding Mechanism

100 *per cent* (90 *per cent* capital subsidy and 10 *per cent* loan) funds were required to be provided by REC to the State Government for the eligible projects. Further, under bi-partite agreement signed by the State Government with REC, funds were to be released by the REC to the State Government in four installments (first three @ 30 *per cent* of the sanctioned project cost and fourth 10 *per cent* on furnishing of the completion certificate after final monitoring by REC). First installment (30 *per cent*) was to be released within 15 days from the date of execution of the loan documents and furnishing of undertaking by the implementing agency that the contract for execution of the project would be awarded within one week from the date of release of the first installment. Second and third installments were to be released on furnishing 80 *per cent* expenditure details of the previously released installments by the State Government to REC. In the event of non-implementation of the projects satisfactorily as per the conditionalities in the guidelines, the capital subsidy could be converted into interest bearing loans.

In the State, the Department entered (September 2005) into a bi-partite agreement with the REC. Subsequently, the Department entered (September 2005/November 2009) into tripartite agreements with the REC and the implementing agencies viz., NHPC and JKPDC wherein it was stipulated to release funds directly to the implementing agencies by the REC in suitable installments as prescribed under the bi-partitie agreement signed with the REC.

Under the bi-partite agreement, the Department had also to specify quarterly milestones and progress thereof was to be reviewed jointly by REC and the authorized representatives of the State Government in the quarterly performance review meetings.

The details of funds received by the implementing agencies and utilisation thereagainst during 2006-11 are shown in the table below:-

Table 1.4.4

(₹ in crore)

Year	OB	Funds received	Interest earned	Total availability of funds	Funds utilised	Unspent balances (percentage)
2006-07	-	19.59	-	19.59	-	**19.59 (100)**
2007-08	19.59	19.59	0.57	39.75	41.36	**(-) 1.61 (-)**
2008-09	(-) 1.61	187.12	1.52	187.03	146.79	**40.24 (22)**
2009-10	40.24	354.40	2.77	397.41	216.70	**180.71 (45)**
2010-11	180.71	84.03	5.49	270.23	94.84	**175.39 (65)**
Grand Total		**664.73**			**499.69**	

As can be seen, the utilisation of funds ranged between zero and 78 *per cent* during the last five years resulting in accumulation of unspent balances at the end of each year. This had led to non-completion of the targeted works and non-extension of benefits to the consumers, besides undue financial aid to the executing agencies on account of earning of interest on unutilised grants. It was seen that NHPC had earned interest of ₹ 10.35 crore on unspent balances lying with it during the year 2007-08 to 2010-11.

1.4.9 Restructured Accelerated Power Development Reforms Programme

The Government of India (GOI) approved (2002-03) Accelerated Power Development Reforms Programme (APDRP) with the objective of reduction in AT&C losses, infrastructure development by upgrading sub-transmission and distribution system and 100 *per cent* metering of all categories of consumers.

In order to carry on the reforms further, the GOI launched the Restructured APDRP (R-APDRP) in July 2008 as a Central Sector Scheme for XI Plan. The R-APDRP scheme comprises Parts 'A' and 'B'. Part 'A' was dedicated to establishment of IT enabled system for achieving reliable and verifiable baseline data system in all towns besides installation of SCADA[33]/Distribution Management System. For this, 100 *per cent* loan is provided, and was convertible into grant on completion and verification of same by independent third party evaluating agencies. Part 'B' of the scheme deals with strengthening of regular sub-transmission & distribution system and upgradation of projects.

Activities under APDRP

1.4.9.1 Programme Implementation and Financial Performance

The details of the funds released by GOI, mobilized from other agencies (including REC/ PFC), utilization thereagainst and balances are depicted below.

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33 Supervisory Control and Data Acquisition – It generally refers to industrial control systems: computer systems that monitor and control industrial, infrastructure, or facility-based processes.

Table 1.4.5

(₹in crore)

Year	O.B	Funds released by GOI	Others	Total funds available	Funds utilised	Balance	*percent*age of balance to funds available
2006-07	88.16	184.89	Nil	273.05	134.19	138.86	51
2007-08	138.86	85.71	Nil	224.57	109.65	114.92	51
2008-09	114.92	26.43	30.07	171.42	160.14	11.28	07
2009-10	11.28	130.84	Nil	142.12	60.48	81.64	57
2010-11	81.64	81.36	Nil	163.00	27.38	135.62	83
Total		509.23	30.07		491.84		

Against the availability of ₹ 627.46 crore during the period 2006-11, expenditure of only ₹ 491.84 crore (78 *per cent*) had been incurred resulting in non-achievement of key objectives of the programme.

Our scrutiny revealed as below:

The programme was taken up in 12 erstwhile districts of the State for implementation under six projects estimated to cost ₹ 1100.13 crore by seven Electric Maintenance and Rural Electrification (EM&RE) Circles of the State, duly approved by the GOI during 2002-03 and 2004-05 with completion schedule by the end of 10th Five Year Plan (2006-07).

The implementation of the programmes was marred by non-prioritisation of project works in densely electrified zones in urban and industrial areas, improper planning in the formulation of project proposals, non-conversion of existing distribution network into High Voltage Distribution System, etc. As a consequence, the project targets were not achieved by the end of 2006-07 and works spilled over to 11th Five Year Plan and with R-APDRP in place the projects sanctioned under APDRP during 10th Plan and not taken up for execution were ordered to be closed. The State Government constituted (October 2009) a committee to clear work done claims and completion cost of works under short closure of APDRP. Funding for the incomplete works, however, continued upto March 2011. It was seen that the works had been mainly executed departmentally instead of pre-qualified turnkey contractors selected on a competitive basis as per the guidelines.

1.4.9.2 The physical and financial performance under all components of the programme ending March 2006, between 2006-11 and ending March 2011 in respect of the entire State is depicted in ***Appendix-1.5***.

Huge shortfall ranging between 74 and 95 *per cent* under replacement of overhead H.T line by underground cables, erection of 11 K.V. cable, replacement of overhead L.T line by underground cables, reactive compensation and modernisation/ computerisation, besides consumer metering (52 *per cent*) indicated that the components which were vital for reducing losses and enhancing financial health of the Department were not prioritised resulting in non-fulfillment of envisaged goals.

1.4.9.3 Despite spending ₹ 491.84 crore on six projects during 2006-11 with progressive expenditure of ₹ 812.90 crore ending March 2011, the envisaged benefits could not accrue as indicated below:

Table 1.4.6

S.No	Benchmark Parameters	Project	Level at the time of sanction of the project *(per cent)*	Target Level of achievement set for the State *(per cent)*	Level actually achieved *(per cent)*
1.	T&D/AT&C losses	EM&RE, Kashmir	56	24	61
		EM&RE, Jammu	44	25	42
2.	Failure rate of distribution transformers	EM&RE, Kashmir	38	07	41
		EM&RE, Jammu	38	10	43
3.	Meter Installation	EM&RE, Kashmir	20	100	33
		EM&RE, Jammu	45	100	70

Thus, the programme objectives of reducing T&D losses, bringing about commercial viability in power sector, ensuring consumer satisfaction could not be achieved due to slow/non-execution of works under essential components (consumer/feeder metering, capacitor installations, modernisation works, replacement of overloaded LT lines by cable reactive compensation, etc.), diversion of programme funds, idle/un-fruitful investments and excess over approved costs as brought out in the succeeding paragraphs.

1.4.9.4 Idle investment

Two divisions[34] spent ₹ 9.98 crore on construction of twelve 33 KV receiving stations (Out of 113 targeted under APDRP) during 2004-11 for evacuation of power to various areas in three districts of Rajouri, Poonch and Anantnag. However, power could not be evacuated from eight Receiving Stations completed at a cost of ₹ 9.18 crore during 2009-11 as no feeder lines had been laid due to non-provision of requisite funds. Apart from this, construction of four receiving stations against which ₹ 0.80 crore had been booked as of March 2010 on account of procurement of material, had to be dropped due to short closure of APDRP. Thus, funds spent on construction of seven (three completed and four incomplete) receiving stations were not extending the benefits for which the amount was spent since March 2010 & March 2011 whereas investment made on the remaining five stations was being partially utilised due to non-laying of additional feeder lines.

In reply, the Executive Engineers of EM&RE Divisions Rajouri and Poonch stated (June 2011) that demand of funds amounting to ₹ 63.66 lakh (Rajouri: ₹ 40.25 lakh and Poonch: ₹ 23.41 lakh) placed in 2009-10 had not been met as of June 2011.

[34] Sub-Transmission Division, Kalakote, Sub-Transmission Division, Bijbehara

1.4.9.5 Diversion of funds

Six divisions[35] diverted (2006-11) ₹ 3.48 crore to creation of sub-stations, renovation of sub-stations, improvement of LT lines, payment of wages, purchase of desktop, digital copier, furniture, voltage stabiliser, renovation of divisional office building, modernisation of air conditioning, renovation of circle office and divisional offices, etc. not provided in the approved project reports under the programme.

This was despite the fact that diversion of similar nature had been pointed out in the Report of CAG for the year ended 31 March 2006.

In reply, the Executive Engineers (EM&RE Division Rajouri & Poonch) stated (June 2011) that sub-stations were created as per public demand on the recommendations of the representatives of the local people. Reply was, however, silent about the reasons for diversions made for office contingencies.

1.4.9.6 Excess expenditure over approved cost

Four divisions[36] exceeded the approved cost by ₹ 3.14 crore on execution of one to six components (laying/replacement of 11 KV lines, laying/reconductoring of LT lines, creation/augmentation of 11/04 KV Sub-stations, construction/erection of new receiving stations/33 KV lines, modernisation works and consumer metering etc.) at the end of March, 2011 without seeking approval of Ministry of Power, Government of India.

While the Executive Engineers of EM&RE Divisions of Udhampur and Batote stated (June 2011) that the reason for exceeding the approved cost was price/cost escalation, no reply was received from the Kashmir based divisions. Justification of price/cost escalation does not hold good as per short closure guidelines whereunder increase in approved cost was to be allowed only in the case of open-bid turnkey projects and not in case of works which were executed departmentally.

1.4.9.7 Non-implementation of High Voltage Distribution System (HVDS)

Guidelines provided for conversion of existing network into High Voltage Distribution System (HVDS). This was an effective method of reducing technical losses, theft in LT lines, etc. By adopting this process the consumer could not resort to hooking which was the common way of committing theft of power in the State. In Kashmir Division, PDD had started pilot HVDS system at Nishat and Soura of Srinagar District in 2005-06 which had given encouraging results. However, no follow up steps had been taken to introduce this system in other areas to reduce losses/pilferage.

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35 (i) EM&RE Division, Rajouri, ₹ 82.31 lakh (ii) EM&RE Division, Poonch, ₹ 121.49 lakh, (iii) EM&RE Division-I, Srinagar ₹ 47.36 lakh, (iv) EM&RE Division, Kulgam ₹ 8.64 lakh, (v) EM&RE Division, Ganderbal ₹ 9.41 lakh, (vi) STD-II, Srinagar ₹ 78.32 lakh

36 (i) EM&RE Division, Udhampur (four components) ₹ 71.88 lakh, (ii) EM&RE Division, Batote (Six components) ₹ 115.61 lakh (iii) STD-II, Srinagar (Three components) ₹ 102.42 lakh (iv) STD, Bijbehara (One component) ₹ 23.66 lakh

Though non-inclusion of HVDS and inclusion of more LT lines in Project Reports had been commented upon in the Report of CAG for the year ended 31 March 2006, no corrective measures had been taken and LT lines had continued to be added. During 2006-11, 1620.593 CKM of more L.T. lines at a cost of ₹ 39.55 crore had been added to the system raising T&D losses further from 45 *per cent* in 2005-06 to 62.12 *per cent* in 2010-11. The DCP informed (June 2011) that HVDS implementation had now been included in the proposals under R-APDRP.

Activities under R-APDRP

1.4.9.8 Establishment of IT enabled system

Part–A of the R-APDRP scheme is dedicated to establishment of IT-enabled system and SCADA/Distribution Management System.

The activities include;

- Preparation of base-line data for the project area covering consumer indexing, G.I.S mapping, metering of distribution transformers and feeders and automatic data logging for all DTRs and feeders and SCADA/DMS System (only in project areas having a population over four lakh and energy input of 350 MU).
- Asset mapping of entire distribution network at and below the level of 11 KV transformers including DTRs and feeders, low tension lines, poles and other distribution equipment.
- Adoption of IT applications for meter reading, billing and collection, energy accounting and auditing, MIS, redressal of consumer grievances, establishment of IT enabled consumer service centres etc.
- The base-line data and required system is to be verified by an independent agency appointed by the Ministry of Power.

The GOI approved (November 2009) 30 projects of Part-A under R-APDRP of the State for ₹ 144.11 crore which was revised (December 2010) to ₹ 191.35 crore (₹ 151.99 crore as PFC loan and ₹ 39.26 crore as State Share) for completion in 18 months. The State Government had framed these projects for 30 towns under Part-A with the assistance of IT consultants.

It was seen that though the process had been initiated in November 2009 the delay in finalisation of contracts which had continued upto February 2011 under Part-A had delayed actual implementation of the projects with the result that project reports under Part-B were under process as of March 2011 which had in turn affected process of reduction of Aggregate Technical and Commercial (AT&C) losses by envisaged three *per cent* per year as per the guidelines.

It was seen that the funds released by the GOI during the last two years had remained almost unutilised as tabulated below.

Table 1.4.7

(₹ in crore)

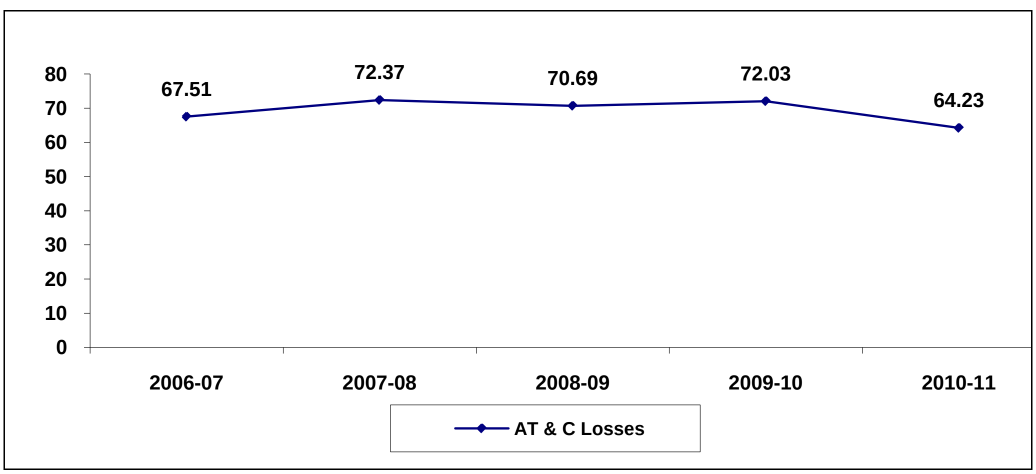
Year	O.B	Funds released by		Funds available	Funds utilised	Balance	Percentage of balance to funds available
		GOI	Others				
2009-10	0.00	40.347	0.068	40.415	0.0679	40.347	**99.83**
2010-11	40.347	5.25	0.50	46.097	0.04924	46.048	**99.89**

In view of the delayed award of contracts, the works were unlikely to be completed by the end of three years period from the date of original approval (i.e. 26th November 2009) which would entail loss of conversion of 100 *per cent* loan as grant, besides repayment of full loan alongwith interest. Steps taken either by the PDD or the Nodal Agency (PFC) to adhere to the completion schedule before the crucial date of 25th November 2012 were not intimated.

1.4.9.9 Strengthening of sub-transmission and distribution system

One of the prime objectives of R-APDRP is to strengthen the distribution system with focus on reduction of AT&C losses on sustainable basis. For special category states, 90 *per cent* loan is provided by GOI, which is convertible to grant in five tranches, subject to AT&C loss levels being maintained at or below 15 *per cent* for five years. The graph below depicts the AT&C losses over the review period.

Chart-II



During the review period, the AT&C losses remained between the level of 64.23 and 72.37 *per cent* which was over four times more than the acceptable level of 15 *per cent*.

1.4.9.10 Consumer metering

Attainment of 100 *per cent* metering is one of the objectives of the R-APDRP scheme. As per benchmarks kept under 3rd Tripartite MOU signed between the Union Ministry of Finance, Planning Commission, Government of India and the State Government on 6th July, 2009, the State Government had to take steps to dovetail funds under APDRP, R-APDRP and normal Plan (2009-10) to achieve 75 *per cent* consumer metering, besides making functional all non-functional meters damaged in the disturbances of summer 2008 in the State. Further, under Part 'A' works of R-APDRP scheme, 100 *per cent* metering was committed by the State Government in 30 identified towns by June 2011 for establishing base-line data. However, there were variable dates for achieving 100 *per cent* metering of consumers as discussed below:-

(i) The SERC had, in its directives issued in tariff order for 2007-08, fixed target date for 100 *per cent* metering across all consumer categories at 31st December 2009 which was further extended to 31st December 2011 in the tariff order for 2010-11.

(ii) As per J&K Electricity Act-2010 notified in April 2010, 100 *per cent* metering is to be achieved by April 2012. Against these variable target dates, actual achievements as intimated in June 2011 are tabulated as under:-

Table 1.4.8

S. No.	*Region*	*No. of consumers as on 31.08.2010*	*No. of consumers metered*	*Percentage of consumers metered*
1.	Kashmir	6,39,134	2,07,247	32
2.	Jammu	5,81,882	4,64,835	80
	Total	**12,21,016**	**6,72,082**	**55**

(Source: Data furnished by the Department)

- Test-check of records of Electric Central Stores Division, Pampore revealed that the Electric Maintenance Divisions, Kashmir had lifted 2,97,492 single phase digital energy meters procured by P&MM wing at a cost of ₹ 30.23 crore during 2003-09. This shows that full quantity of procured meters had not been used by the department as it could not cover even Srinagar city in full. This also meant that parts of other districts were mostly un-metered paving way for large scale misuse of electricity. Records showed that the Chief Engineer, EM&RE Wing, Srinagar had observed (July 2010) that in eight[37] divisions, meters were lying in stock in excess of the un-metered connections. Against 15,683 un-metered installations in these areas, 57,529 meters were available with the divisions resulting in retention of excess quantity of 41,846 meters. Sensing that 100 *per cent* metering of project areas covered under R-APDRP was a prerequisite for implementation of part-A of the said project, the Chief Engineer, EM&RE, Kashmir ordered (July 2010) relocation of these excess energy meters. Out of the excess meters, 36,900 meters were withdrawn from these divisions and allotted to other seven[38] divisions indicating that the initial distribution had been carried out without proper assessment of requirements.

- Scrutiny of records further revealed that majority of digital meters installed during 2003 to 2007 had failed to work at low voltages and low temperature and thus did not

[37] Awantipora, Baramulla, Bijbehara, Handwara, Kulgam, Pulwama, Sopore and Sumbal
[38] Anantnag, Srinagar I, II, III, IV, V and Sumbal

record correct consumption of energy in winter, which had proved more of a liability leading to massive un-recorded consumption by consumers. The department started replacing these meters by LCD type in some areas of Srinagar city. Evidently, no assessment of working of digital meters in low voltage/temperature had been made before going for large scale purchase. No orders for procurement of meters were placed by P&MM wing during 2009-10 and 2010-11 due to disagreement about the type of meters to be procured, thus, badly affecting the metering programme. Funds available under metering component could not, as such, be utilised.

- Test check of records of Electric Central Stores Division, Pampore revealed that against the purchase of 4,000 three-phase Whole Current AC Static Energy Meters by the P&MM wing at a cost of ₹ 1.14 crore in July 2006, only 3,205 meters had been lifted by various utility divisions of Kashmir and the balance 795 meters were lying in the Electric Central Store for the last more than three years. These meters had been procured for installation of commercial and big consumer connections. The action of the Electric Maintenance & RE Department resulted in locking up of huge government money amounting to ₹ 22.03 lakh besides non- plugging of energy theft and deliberate omission of proper energy accounting.

- The EE, EM&RE Division, Vijaypur (Jammu) could not utilise material (meters and allied cable) procured for ₹ 67.36 lakh upto March 2010 for installation of consumer meters despite allotment of ₹ 85.51 lakh during 2009-10 under APDRP. Out of the allotted funds, ₹ 8.16 lakh only were spent on installation of 1,870 meters and the balance amount of ₹ 77.35 lakh was surrendered in March 2010. No further funds were released during 2010-11 for utilisation of the material procured upto March 2010 resulting in blocking of the investment of ₹ 67.36 lakh. In reply it was stated (October 2010) that on receipt of funds, the material purchased would be utilised on installation of meters lying in the Division. Further progress was awaited (July 2011).

1.4.10 Operational efficiency

The operational performance of the Department is judged on the basis of availability of adequate power for distribution, adequacy and reliability of distribution network, extent of line losses, detection of theft of electricity, etc. These aspects have been discussed below.

1.4.10.1 Purchase of Power

The demand for energy in the State has been increasing year after year. Assessment of future demand and requirement of power is calculated on the basis of consumption trends of the past, present requirement, load growth trends and T&D losses and its trend. SERC approves the sources of purchase of power and the purchase cost based on the estimates made in the ARR.

The demand and availability scenario of energy in the State during the period from 2006-07 to 2010-11 was as under:-

Table 1.4.9

(in Million Units)

	2006-07	2007-08	2008-09	2009-10	2010-11
Energy requirement	11,343	14,037	14,750	15,656	16,544
Energy availability	8,237	8,744	9,147	10,371	10,876
Deficit	3,106	5,293	5,603	5,285	5,668
Deficit (*Percentage*)	**27**	**38**	**38**	**34**	**34**

The above details indicate that energy deficit had increased from 27 *per cent* in 2006-07 to 38 *per cent* in 2008-09. The deficit had come down to 34 *per cent* in 2010-11 apparently due to availability of more power after commissioning of Baglihar and Sewa–II Hydroelectric Projects in the State.

To meet the growing demand of power, the State Government purchases power from Northern Grid as per assessment made in the Electric Power Survey and the approval granted by the SERC. The details of purchase of power assessed and approved by SERC vis-a-vis actual purchase made by the PDD, between 2006-07 and 2010-11 were as under:-

Table 1.4.10

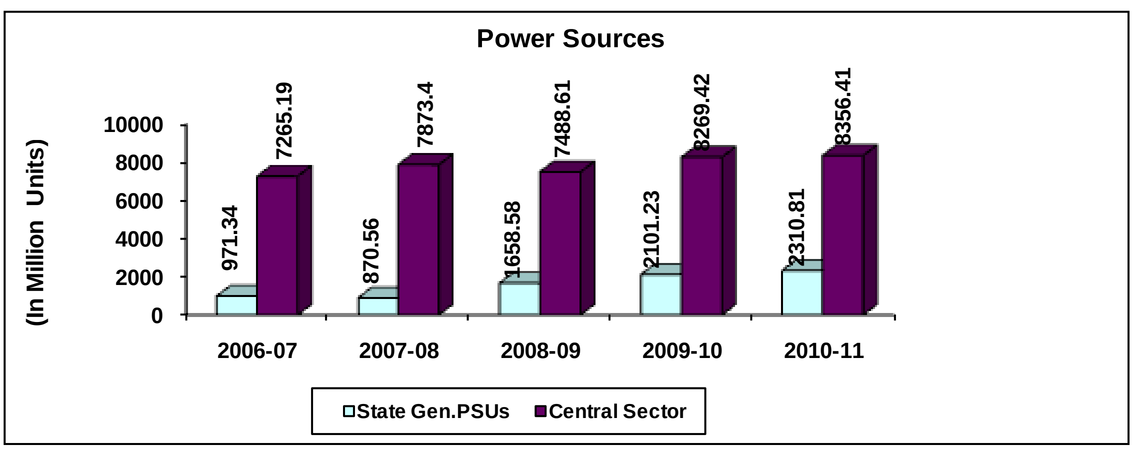
(in Million Units)

Year	Demand assessed in EPS	Purchases approved by SERC	Actual Power purchased	Power Deficit	Excess against approved purchase
(1)	**(2)**	**(3)**	**(4)**	**(5) = (2 – 4)**	**(6) = (4 –3)**
2006-07	9,099.00	8,150.00	8,236.53	862.47	86.53
2007-08	9,704.20	7,947.00	8,743.96	960.24	796.96
2008-09	10,309.40	8,674.00	9,147.21	1,162.19	473.21
2009-10	10,914.60	10,194.35	10,370.65	543.95	176.30
2010-11	11,519.80	10,004.62	10,667.22	852.57	662.60

No reasons for purchasing excess power without proper approval of SERC were furnished.

Source wise purchase of power during 2006-11 (in MUs)

Chart-III



The above details indicated increase in purchase of 1,339.47 MU (138 *per cent*) from State PSU against the increase of 1,091.22 MUs (15 *per cent*) from central sector during the period from 2006-07 to 2010-11 indicating improvement in generation of power at the State level.

1.4.10.2 Sub-Transmission & Distribution Losses

The distribution system is an important and essential link between the power generation source and the ultimate consumer of electricity. For efficient functioning of the system, it must be ensured that there are minimum losses in sub-transmission and distribution of power. While energy is carried from the generation source to the consumer, some energy is lost in the network. The losses at 33 KV stage are termed as sub-transmission losses while those at 11 KV and below are termed as distribution losses. These are based on the difference between energy received (paid for) by the Distribution Company and energy billed to consumers. The percentage of losses to available power indicates the effectiveness of distribution system. The losses occur mainly on two counts, i.e., technical and commercial. Technical losses occur due to inherent character of equipment used for transmitting and distributing power and resistance in conductors through which the energy is carried from one place to another. On the other hand, commercial losses occur due to theft of energy, defective meters and excess drawal through unmetered supply, etc.

Under 3rd tripartite agreement signed (July 2009) for the implementation of R-APDRP in the State, the Government had to take steps to reduce T&D losses by at least three *per cent* per year.

The table below indicates the energy losses for the State as a whole for the last five years upto 2010-11.

Table 1.4.11

(In Million units)

S. No.	Particulars	2006-07	2007-08	2008-09	2009-10	2010-11
1.	Energy purchased	8,236.53	8,743.96	9.147.21	10,370.65	10,667.23
2.	Energy sold	4,030.84	3,331.64	3,538.70	3,833.00	4,041.00
3.	Energy losses (1-2)	4,205.69	5,412.32	5,608.51	6,537.65	6,626.23
4.	*Percentage* of energy losses	51.06	61.90	61.27	63.04	62.12
5.	*Percentage* of losses allowed by SERC	50.70	46.70	62.09	63.60	57.79
6.	Excess losses (in MUs)	29.77	1,328.90	-	-	461.64
7.	Average realisation rate per unit (in ₹)	2.04	2.62	-	-	2.92
8.	Value of excess losses (in crore)	6.07	348.17	-	-	134.80

The table above shows that losses had ranged between 51 and 63 *per cent* during the last five years ending March 2011. As per MOU (April 2002) executed with the GOI under APDRP, the State Government was committed to bringing down T&D losses to 25 *per cent* from 46 *per cent* by December 2006. These losses had alarmingly gone up from 45 *per cent* in 2005-06 to 62 *per cent* in 2010-11 due to unsatisfactory implementation of the Centrally Sponsored Programmes. Reduction in these losses is the most significant step towards making the department financially self-sustainable. Reducing losses was important from the fact that three *per cent* decrease in losses per year could add ₹ 93.43 crore to the revenue of the department annually. The main reasons for such high energy losses were significant number of unmetered consumers and theft/misuse of electricity.

Records revealed that while approving tariff for 2010-11, the SERC had noted that the T&D losses in the State were amongst the highest in the country. Despite various submissions made by the Department with regard to the initiatives being taken for reducing such losses in the State over the years, it had miserably failed in controlling the losses. It was seen in audit that despite all assurances to make sincere efforts to reduce T&D losses to an acceptable level, such losses for 2010-11 were at staggering 62 *per cent* which was 33 *per cent* higher than the proposed reduction of 29 *per cent* by 2010-11 spelt out in the 11th five year plan document. In response, the Department stated that a detailed turn-around plan to improve the T&D network and reduce losses to acceptable limits under R-APDRP scheme covering 30 towns in the state having population above 10,000, had been worked out.

1.4.10.3 Excessive transformation capacity

Transformer is a static device installed for stepping up/stepping down voltage in transmission and distribution system. The energy received at high voltage (132 KV, 66 KV and 33 KV) from primary sub-stations of the Transmission Companies is transformed to lower voltage (11 KV) at 11 KV sub-stations to make it usable by the consumers. In order to cater to the entire connected load, the transformation capacity should be adequate. The ideal ratio of transformation capacity to connected load is considered as 1:1. The table below indicates the details of transformation capacity at 11 KV sub-stations and connected load of the consumers in 27 out of 31 divisions (EM&RE) during the period 2006-11.

Table 1.4.12

(In MVA)

Year	Transformation capacity	Connected loads	Gap in transformation capacity	Ratio of transformation capacity to connected load
2006-07	4,322.09	1,821.23	2,500.86	2.37:1
2007-08	4,573.77	1,885.39	2,688.38	2.43:1
2008-09	4,768.24	1,932.70	2,835.54	2.47:1
2009-10	4,908.58	2,059.59	2,848.99	2.38:1
2010-11	5,066.51	2,199.78	2,866.73	2.30:1

(Source: Data collected from field units)

It can be seen that the ratio of transformation capacity to total connected load ranged around 2.39:1 (against standard ratio of 1:1), thus representing excess transformation capacity against the connected load indicating that the transformers provided were more than the requirements. Reasons, for such huge distribution of transformation capacity which is not in synchronisation with the actual load, called for from the Development Commissioner Power were awaited (September 2011).

1.4.10.4 Performance of Distribution Transformers

The SERC had fixed the norm of failure of Distribution Transformers (DTRs) in its tariff orders. The details of norms fixed, actual DTRs failed and the expenditure incurred on their repairs in 27 of the 31 divisions is depicted in the table below.

Table 1.4 13

S. No.	Particulars	2006-07	2007-08	2008-09	2009-10	2010-11
1.	Existing DTRs at the close of the year	28,275	29,910	30,239	32,936	34,586
2.	DTRs failed	9,515	10,938	11,401	12,872	15,394
3.	Percentage of failures	33.65	36.56	37.70	39.08	44.50
4.	Norms allotted by SERC (*percentage*)	5	5	5	5	5
5.	Excess failure (*percentage*) over norms	28.65	31.56	32.70	34.08	39.50
6.	Expenditure on repair of failed DTRs (in crore)	10.358	16.218	16.244	16.652	16.661

Evidently, the failure rate of DTRs was higher than the permissible rate to the extent of 28.65 to 39.50 *per cent*. This could be minimised by taking adequate steps for preventive maintenance and avoiding overloading of the DTRs.

Cause-wise analysis of failure of DTRs revealed that the percentage of failure due to overloading ranged between 60 and 68 *per cent* during the years under review as shown in the table.

Table 1.4.14

Year	Total number of DTRs failed during the year	Number of failures due to overloading	Percentage of failures due to overloading
2006-07	9,515	6,516	68
2007-08	10,938	6,936	63
2008-09	11,401	7,527	66
2009-10	12,872	8,301	64
2010-11	15,394	9,310	60

(Source: Data furnished by the Divisions of Kashmir Province and CE Jammu)

The high rate of failure of DTRs due to overloading was attributed to large scale theft and misuse of power due to non-installation of meters. Other reasons accounting for failure of DTRs were reported as thunder, lightning, high speed winds and torrential rains which could be avoided by installation of lightning arrestors on sub stations and observance of regular quarterly maintenance schedule.

1.4.10.5 Pending liability of ₹ 14.14 crore on account of repair of transformers

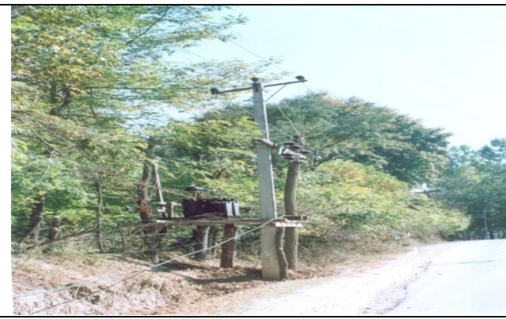
During test check of records of the Chief Engineer, EM&RE Wing, Jammu it was seen that a liability of ₹ 14.14 crore on account of repair of transformers was created by 15 utility divisions in Jammu province upto March 2011. The Chief Engineer stated that due to release of inadequate funds, liability was created by the divisions over the years on repair of transformers required for supply of power to the consumers. He further stated that the matter had been taken up with the Administrative Department for providing necessary funds for clearance of the liability.

1.4.10.6 Charging of newly constructed systems without inspection and clearance

Under State Electricity Act/Rules, newly created infrastructure (sub-stations, HT and LT lines network) had to be inspected for safety precautions by the Inspection Agency of the Department and a fitness certificate issued therefor before charging the system. It was observed that the network of 1,086 sub-stations and 2,290.34 CKM of HT and LT lines was created during 2006-11 by five test-checked divisions of EM&RE Wing, Jammu but the requisite inspection had not been conducted even in a single case. Non-conduct of mandatory inspection made the entire network vulnerable to fatal accidents. The fact remains that 80 cases were pending payment of compensation on account of electric shocks in these divisions. In reply the Executive Engineer, EM&RE Division, Poonch stated that the Inspection Agency had been approached for the requisite inspection/issue of fitness certificate. The reply is not tenable as the Inspection and issue of fitness certificate had to be carried out well before charging the systems.

In Kashmir province, out of 5,543 sub-stations created during 2006-11, inspection of 2,269 (41 *per cent*) sub-stations was conducted before charging the sub-stations for supply of power leaving 59 *per cent* newly created sub-stations vulnerable. Further, out of 208 receiving stations, only 13 (six *per cent*) had been inspected by the concerned division. The non-clearance of the installations was in clear violation of the electricity rules. During field visits it was observed that the electric installations at a large number of places were in a shambles, posing a grave risk to the lives of the population. At a number of places L.T conductors had been laid on sleek wooden poles by the villagers themselves and the department had energised the same. At some places LT lines were tied on standing poplar trees as shown below.

	
Low lying Transformer (Reasi)	***LT Line on Tree (Bon-Dayalgam – Doru)***

	
LT Line attached to Residential shed (Mohri-pora Bhagat mohalla)	***Transformer just above ground level with low level LT Line (Pingnan- Srinagar)***

1.4.10.7 Capacitor Banks

Capacitor bank improves power factor by regulating the current flow and voltage regulation saves loss of energy. In the event of voltage falling below normal, the capacitor bank can set right the system by improving the voltage profile and reducing dissipation of energy to a great extent.

Under benchmarks of the 3rd tripartite agreement for implementation of R-APDRP, capacitor banks were to be added on sub-stations/feeders that feed energy to at least 75 *per cent* of consumers with a load of 25 KVA or more. It was noticed that coverage of capacitor banks ending August 2010 was as under:-

Table 1.4.15

S. No.	Particulars	Jammu	Kashmir	Total
1.	Existing connections with load of 25 KVA and above	2,495	1,268	3,763
2.	Connections to be covered by capacitors (75 *per cent* of S.No. 1)	1,871	951	2,822
3.	Capacitors installed at load	806	202	1,008
4.	Connections covered by shunt capacitors at Grid Stations	934	412	1,346
5.	Total coverage (3+4)	1,740	614	2,354
6.	Coverage (percentage)	70	48	63

(Source: Data furnished by the Department)

From the above, it would be seen that the achievement was only 63 *per cent* against 75 *per cent*, kept as benchmark.

1.4.11 Non-completion of System-Improvement-Scheme under other CSS and State Sector

1.4.11.1 As per REC norms, in case of non-start of an REC loan-funded scheme within one year of disbursement of the 1st installment of 20 *per cent* loan, the entire loan alongwith penal interest is to be recovered from the loan installments due for disbursement for other sanctioned schemes. Audit of the accounts of the Development Commissioner Power, Jammu showed (April 2011) that for two system improvement schemes (Pahalgam and Chanderkote), 1st installments disbursed upto March 2006, had not been started till September 2010. The outstanding loan alongwith interest/penal interest @ one *per cent* per annum amounting to ₹ 1.12 crore was deducted by the REC at source from the due installments of other sanctioned schemes. Thus, lack of proper planning in prioritising execution of the sanctioned schemes with the available resources had resulted in avoidable loss of money on account of penal interest of ₹ 28.66 lakh besides loss of an opportunity for implementation of SIS.

1.4.11.2 The Executive Engineer, EM&RE Division, Kathua took up the execution of works relating to providing irrigation facilities through pump sets to the farmers of Kathua district at an estimated cost of ₹ 2.24 crore for creation of infrastructure for energisation of 754 pump sets within a period of two years under REC loan sanctioned scheme. It was seen that the scheme had continued upto March 2010 and completed after creation of infrastructure for 855 pumps at a cost of ₹ 2.08 crore. However, the Department had issued permanent connection to only 232 pump sets and the rest were provided temporary connections.

The verification of revenue ledgers showed that only permanent connections (232) were assessed for revenue and temporary connections treated as lapsed. Thus, only 27 *per cent* (232 out of 855) of the potential created was utilised and the balance 73 *per cent* (₹ 1.52 crore) expenditure remained unfruitful. In reply the EE stated that efforts would be made to utilise full potential and progress achieved would be intimated. Further progress was awaited (July 2011).

1.4.11.3 Against the estimated cost of ₹ 197.15 lakh approved by the Chief Engineer, EM&RE Wing PDD, Jammu in September 2007 for construction of 33 KV Battal-Ramkote Transmission Line within two months under T&D (State Plan), ₹ 21.69 lakh were spent on procurement and erection of 125 ST poles during the year 2007-08 and no further efforts were made to complete the transmission line. The Executive Engineer, STD-III, Kathua stated (August 2011) that work could not be completed as funds were not made available during 2008-09 to 2011-12 (August 2011) despite being repeatedly demanded in the action plans under T&D State Plan and the project being cleared by the State Techno-Economic Committee. Thus unplanned execution without ensuring availability of resources had resulted in idle investment of ₹ 21.69 lakh on purchase and erection of poles.

1.4.11.4 Financial rules provide that supervision charges on works undertaken on behalf of other Government Departments/Agencies be recovered as per rates specified therein. During test-check of records of EM&RE Division, Rajouri it was noticed that supervision charges of ₹ 74.99 lakh on the works executed on behalf of army authorities on the Line of Control (LOC) during the period ending March 2011 had not been recovered. In reply, the Executive Engineer stated (June 2011) that the matter regarding recovery of supervision charges would be taken up with army authorities and outcome intimated to audit.

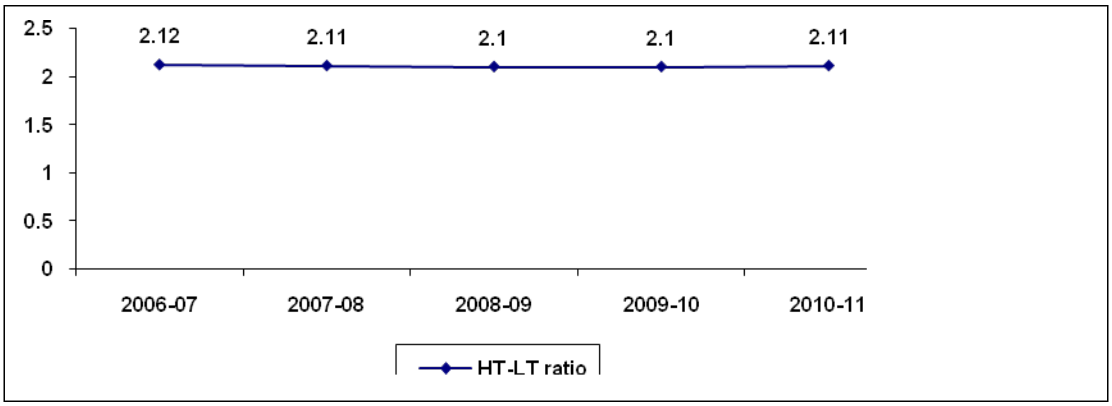
1.4.12 Commercial losses

Majority of commercial losses relate to consumer metering and billing besides pilferage of energy. While metering and billing aspects have been covered separately, other observations relating to commercial losses are discussed below:-

1.4.12.1 Implementation of LT less system

High voltage distribution system is an effective method of reducing technical losses, prevention of theft, improve voltage profile and better consumer service. The GOI had also stressed (February 2001) the need to adopt LT-less system of distribution through replacement of existing LT lines by HT lines to reduce the distribution losses. It was seen that the ratio of HT to LT lines created between 2006-07 and 2010-11 stood between 1:2.10 and 1:2.12 as depicted below.

Chart-IV



It may be seen from the above graph that the high ratio of LT over HT during the last five years accounted for corresponding increase in technical and commercial losses during this period.

1.4.12.2 High incidence of theft

Substantial commercial losses are caused due to theft of energy by tampering of meters by the consumers and tapping/hooking by the unauthorised consumers. Theft of energy is an offence punishable under the State Electricity Act. Targets for number of checking theft cases, assessed amount and amount realised has been given in ***Appendix-1.6***. It was seen that the shortfall in achievement of fixed targets of checking had ranged between five and 34 *per cent* during 2006-10. Against the assessed penalty of ₹ 7.65 crore, realisation was ₹ 6.48 crore (85 *per cent*). An amount of ₹ 1.17 crore had, thus, remained unrecovered from defaulters at the end of March 2011.

1.4.12.3 Performance of Raid Teams

In order to minimise the cases of pilferage/loss of energy and save the utility from sustaining heavy financial losses on this account, the State Electricity Act empowers the departmental raid teams to enter the premises of a consumer for inspection and testing of apparatus. The Executive Engineers of the divisions were supposed to prepare work plans to conduct raids by identifying such consumers/areas where large scale theft was suspected. The position of raids conducted during review period was as under:-

Table 1.4.16

(₹ in crore)

S. No.	Year	Total Consumers as on 31st March	No. of consumers checked	Assessed amount	Realized amount	*per cent* age of checking to total No. of consumers
1.	2006-07	11,38,731	17,546	1.09	0.89	1.54
2.	2007-08	11,58,035	13,374	1.65	1.60	1.15
3.	2008-09	11,82,177	14,295	1.82	1.73	1.20
4.	2009-10	12,10,427	25,432	2.13	1.83	2.10
5.	2010-11	12,41,817	28,937	2.92	2.15	2.33

There was a year-on-year improvement both in terms of realisation of revenue from raids as also the number of checking of consumers. However given the enormity of distribution losses the number of raid teams needs to be increased so as to reduce the theft of energy.

1.4.12.4 Un-registered Domestic Consumers

There was a huge gap between the energy supplied and actual revenue realised. Evidently, it was due to theft of energy and also to presence of a significant number of un-registered consumers. In order to plug it, Development Commissioner (Power) had requested Director Consumer Affairs & Public Distribution Department Kashmir/Jammu (March 2010) to make the electricity agreement of consumer a prerequisite for issuance of ration cards for the year 2010-11 and onwards. No follow-up action in the matter was taken by the Department with the result the illegal consumers could not be identified/regularised as evidenced in the huge gap reported between the number of card holders and the number of registered domestic consumers. Against about 20 lakh Ration Card holders in the State, only 12 lakh registered domestic consumers existed at the end of March 2011, resulting in gap of eight lakh. This had not been attended to by the Department.

1.4.13 Billing Efficiency

The Department is required to take reading of energy consumption of each consumer at the end of the notified billing cycle. After obtaining the meter readings, bills are issued to the consumers at sub-divisional level on monthly basis.

The efficiency in billing of energy lies in distribution/sale of maximum energy by the utility division to its consumers and realisation of revenue there from in time. The position of energy available for sale and energy billed during the review period was as under:-

Table 1.4.17

(In MUs)

S. No.	Particulars	2006-07	2007-08	2008-09	2009-10	2010-11
1.	Energy available for sale	8,236.53	8,743.96	9,147.22	10,370.65	10,667.23
2.	Free supply	-	-	-	-	-
3.	Energy billed	4,030.84	3,331.64	3,538.70	3,833.00	4,041.00
4.	*Percentage* of energy billed	49	38	39	37	38

It was seen from the above details that energy billed during the last five years had ranged between 37 and 49 *per cent* of the total energy available for sale. The main reasons for large gap of 4,205.69 MUs to 6,626.23 MUs were non-metering of consumer connections, theft, pilferage and misuse of energy by the consumers.

Audit analysis of the losses due to unbilled energy revealed that the Department had to incur loss of ₹ 858 crore[39] in 2006-07 and ₹ 1,935 crore in 2010-11.

1.4.13.1 Non-achievement of benchmarks under Tripartite Agreement

(i) As per benchmarks of 3rd tripartite agreement for implementation of R-APDRP, cash collected from larger consumers having load of 25 KVA or more, had to be at least 85 *per cent* of the amount billed. The quantum of cash collected from such consumers from September 2009 to August 2010 is reflected in the table below:-

Table 1.4.18

(₹ in crore)

S. No.	Region	Amount billed	Amount collected	*Percentage* of collection
1.	EM&RE Wing, Jammu	374.77	307.36	82
2.	EM&RE Wing, Kashmir	193.26	111.47	58
	Total	**568.03**	**418.83**	**74**

(Source: Data furnished by the Department)

Thus, there was an overall shortfall of 11 *per cent* in the achievement of fixed target of 85 *per cent* in the collection of cash from larger consumers.

(ii) Total cash collected for any preceding 12 months period should be at least 60 *per cent* of the bulk power purchase cost as per the benchmarks under the tripartite agreement. The position of bulk power purchase for the State vis-a-vis total cash collected during 01.09.2009 to 31.08.2010 was as follows:-

Table 1.4.19

(₹ in crore)

S. No.	Period	Power purchase cost	Amount collected			
			Jammu	Kashmir	Total	*Percentage* of collection
1.	01.09.2009 to 31.08.2010	2,881.76	535.93	295.70	831.63	29

(Source: Data furnished by the Department)

As the table shows there existed a huge shortfall (31 *per cent*) in achievement of the target of 60 *per cent* collection.

1.4.13.2 Computerised Billing

Against the target of 75 *per cent* computerised billing of the preceding 12 months (September 2009 to August 2010), achievements were 61 *per cent* as detailed below:-

[39] Calculated on the basis of average sale rate during 2006-07 and 2010-11

Table 1.4.20

S. No.	Particulars	Jammu	Kashmir	Total
1.	Energy billed through computerised billing from 09/2009 to 08/2010 in lakh units (LUs)	10,582.86	12,784.00	23,366.86
2.	Total energy billed from 09/2009 to 08/2010 in lakh units (LUs)	22,355.89	16,130.20	38,486.09
3.	*Percentage* of billed energy through computerised billing.	47	79	61

(Source: Data furnished by the Department)

Non-achievement of fixed targets to the extent of 14 *per cent* (overall) was apparently due to non-installation of computers to a larger extent in Jammu region.

1.4.13.3 Incorrect/under assessment of revenue

As per tariff order for 2010-11, 10 *per cent* extra surcharge on the energy charges (metered or flat) was required to be levied on all consumers who had not installed capacitors of required KVAR on their installations having aggregate inductive load of three HP and above (except domestic and street lights and consumers where KVAH tariff had been introduced). Test-check of revenue records of three[40] utility divisions revealed that 10 *per cent* extra surcharge on such connections had not been levied while issuing bills during the period of review which had resulted in under-assessment of revenue of ₹ 0.69 crore and an equivalent amount remaining unrecovered at the end of March 2011.

The EE, EM&RE Division, Rajouri stated (June 2011) that instructions had been issued to the sub-divisions to levy extra surcharge for non-installation of capacitors. The other two divisions intimated that the claims would be raised against the concerned.

1.4.13.4 Non-levy of late payment surcharge

Tariff order for the year 2010-11 provides levy of late payment surcharge at the rate of 1.5 *per cent* per month which works out to 18 *per cent* per year. It was observed that two[41] divisions had not levied late payment surcharge of ₹ 29 lakh on consumers for non-payment of energy charges during the period from April 2006 to March 2011. The EEs intimated (July 2011) that the claims would be raised against the concerned.

1.4.14 Revenue Collection Efficiency

The table below indicates the balance outstanding at the beginning of the year, revenue assessed and collected during the year and the balance outstanding at the end of the year during the period 2006-11.

[40] Anantnag, Bijbehara and Rajouri
[41] Anantnag, Bijbehara

Table 1.4.21

(₹ in crore)

S. No.	Particulars	2006-07	2007-08	2008-09	2009-10	2010-11
1.	Balance outstanding at the beginning of the year	734.88	821.08	831.19	855.69	908.48
2.	Revenue assessed/billed during the year	517.55	670.48	726.46	840.19	1,059.26
3.	Total amount due for realisation	1,252.43	1,491.56	1,557.65	1,695.88	1,967.74
4.	Amount realised during the year	431.02	660.33	701.92	787.36	894.04
5.	Amount written off during the year	0.33	0.04	0.04	0.04	0.05
6.	Balance outstanding at the end of the year	821.08	831.19	855.69	908.48	1,073.65
7.	Percentage of amount realised to total dues	34.41	44.27	45.06	46.42	45.43

The balance dues outstanding at the end of the year had increased from ₹ 821.08 crore in 2006-07 to ₹ 1073.65 crore in 2010-11.

1.4.14.1 Un-authorised retention of power revenue by the J&K Bank Ltd.

As per agreement drawn by the PDD with the J&K Bank Ltd. collection of power revenue by any branch of the J&K Bank in the State had to be transferred to the Government account within 72 hours of its collection. It was observed that ₹ 23.87 crore collected during the period 2008-11 from five[42] divisions had not been transferred to the official account within the stipulated period and instead un-authorisedly retained for a period ranging between one day and 87 days resulting in loss of interest of ₹ 5.34 lakh, calculated (in respect of three divisions[43]) at the interest rate chargeable on overdraft extended by the J&K Bank to the State Government. In reply the Executive Engineer, EM&RE Division, Poonch stated (October 2011) that the matter was being looked into.

1.4.15 Tariff Fixation

Revenue collection is the main source of generation of funds for the Department. While other aspects relating to revenue collection have been discussed in the preceding paragraphs, the issues relating to tariff are discussed hereunder.

The tariff structure of the power distribution utility is subject to revision approved by the State Electricity Regulatory Commission (SERC) after objections, if any, received against Annual Revenue Requirement (ARR) petitions filed within the stipulated dates. The department was required to file the ARR for each year 120 days before commencement of the respective financial year. The SERC accepts the application filed by the department with such modifications/conditions as may be deemed fit and appropriate and after considering all suggestions and objections from public and other stakeholders. The table below shows the due date of filing ARR, actual date of filing, date of approval of tariff petition and effective date of the revised tariff.

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42 Batote, Poonch, Rajouri, Reasi and Udhampur

43 Batote, Reasi and Udhampur

Table 1.4.22

Year	Due date of filing	Actual date of filing	Delay in days	Date of approval	Effective date
2006-07	30th November 2005	14th November 2006	349 days	Not approved due to delay in filing petitions for 2006-07	
2007-08	30th November 2006	30th November 2006	Nil	28.03.2007	01.04.2007
2008-09	30th November 2007	07th February 2008	69 days	12.09.2008	01.04.2008
2009-10	30th November 2008	16th December 2009	381 days	29.04.2010	The tariff of 2008-09 remained effective for the year 2009-10
2010-11	30th November 2009	20th January 2010	51 days	29.04.2010	01.04.2010

The above details reveal that the delay in filing ARR had ranged between 51 and 381 days during the last five years resulting in significant revenue loss due to non-revision of tariff in 2006-07 and 2009-10.

The position of realisation from sale of power vis-a-vis recovery of fixed costs during the review period was as under:-

Table 1.4.23

(₹ in crore)

Year	Sales (excluding subsidy)	Variable cost	Fixed cost	Contribution (2-3)	Deficit in recovery of fixed cost (4-5)	Deficit as *percentage* of sales (6×100 / 2)
1	**2**	**3**	**4**	**5**	**6**	**7**
2006-07	593.54	1,634.30	291.50	(-) 1,040.76	1,332.26	224.46
2007-08	848.84	1,966.35	368.50	(-) 1,117.51	1,486.01	175.06
2008-09	829.64	1,935.02	335.39	(-) 1,105.38	1,440.77	173.66
2009-10	928.13	2,704.58	436.74	(-) 1,776.45	2,213.19	238.46
2010-11	1,174.62	2,836.51	546.28	(-) 1,661.89	2,208.17	187.99

Though it appears that the tariff is on lower side and needs to be revised for recovery of the costs, it may be highlighted here that the same can be brought in by improving operational efficiency, viz., reduction in/control of AT & C losses, conversion of LT lines to HT lines, metering of unmetered connections/ defective meters, improving billing and collection efficiency, etc., which have been discussed separately in the review.

1.4.16 Consumer Satisfaction

The PDD was required to introduce consumer friendly initiatives, such as introduction of computerised billing, online bill payment, establishment of customer care centres, etc., with a view to enhancing consumer satisfaction and minimising consumer grievances. The position of redressal of grievances in the department was as follows:

The SERC had notified Distribution Performance Standards vide notification dated 19th June 2006 whereunder procedure for handling of complaints through customer complaint centres had been laid down. Under these standards, time limit for rendering services to the customers and compensation payable for not adhering to the complaints had been prescribed. The nature of services included line breakdowns, DTRs failures, period of load shedding/scheduled outages, voltage variations, meter complaints, installation of new meters/connections or shifting thereof, etc.

The PDD, while showing compliance to the benchmarks of the 3rd tripartite agreement signed in July 2009 for the implementation of R-APDRP, stated that consumer call centres at Jammu and Srinagar had been established which were working round the clock. However, roadmap for addressing consumer grievances in an effective manner as per R-APDRP guidelines had not been devised. The overall position with regard to receipt and clearance of complaints was as under:-

Table 1.4.24

S.No	Particulars	2006-07	2007-08	2008-09	2009-10	2010-11
1.	Total complaints received	14,805	15,883	15,372	15,176	16,342
2.	Complaints redressed within time	14,202	15,556	15,120	14,916	16,026
3.	Complaints redressed beyond time	47	136	80	169	77
4.	Pending complaints	556	191	172	91	239
5.	Percentage of complaints redressed beyond time to total complaints	0.32	0.86	0.52	1.11	0.47
6.	Compensation paid if any, to consumers	Nil	Nil	Nil	Nil	Nil

Test-check of records of five divisions[44] showed that no records for registration and disposal of complaints had been maintained by the divisions. The details of complaints filed in the above table were, thus, not based on any verifiable records. It was further noticed that although the SERC had, in its notification issued on 19th June 2006, directed PDD to submit quarterly and annual reports on the performance achieved with reference to overall standards of performance to the Commission, yet no such report (s) had been submitted by the PDD during the review period.

1.4.17 Energy Conservation

Efficient use of energy and its conservation is the least cost option to mitigate the gap between demand and supply. The State Government notified its own Energy Conservation Act 2011 in April 2011 on the lines of the Union Government's Energy Conservation Act 2001. It was stated in June 2011 that Bureau of Energy Efficiency (BEE) would be established in the State for taking further energy conservation measures under the Act 2011.

- The State Government through Development Commissioner (Power), Power Development Department and Chief Executive Officer, Jammu &Kashmir Energy Development Agency (JKEDA) signed a Memorandum of Understanding (MOU) with the Ministry of New & Renewable Energy, Government of India for electrification of remote un-electrified villages through non-conventional energy sources. Under Remote Village Electrification (RVE), Solar lanterns were provided by Jammu and Kashmir Energy Development Agency in un-electrified villages.

44 EM&RE Divisions: Batote, Poonch, Rajouri, Reasi and Udhampur

It was noticed that the central share amounting to ₹ 52.80 crore and the State share amounting to ₹ 6.86 crore stood released ending March 2011 against which an expenditure of ₹ 23.83 crore had been booked ending March 2011. Solar Home Lighting Systems (SHLSs) numbering 15,065 had been distributed to the inhabitants of the un-electrified villages ending March 2011.

- The SERC in its tariff order had also kept provisions of monthly rebate of ₹ 50 for all metered consumers who had installed solar heating system for meeting their hot water and/or cooking requirements.

  No case of availing such rebate had been noticed in the test-checked divisions. The State had also not implemented the Centrally Sponsored '*Bachat Lamp Yojana'* whereunder consumers were to be issued CFLs at concessional cost of ₹ 15 per lamp.

1.4.18 Energy Audit

A concept of comprehensive energy audit was put in place with the objective of identifying the areas of energy losses and taking steps to reduce the same through system improvements, besides accurately accounting for the units purchased/ sold and losses at each level. The main objectives of energy audit are as follows:

- better and more accurate monitoring of the consumption of electricity by consumers;
- elimination of wastages;
- reduction of equipment downtime; and
- Identification of opportunities for operational cost savings and revenue enhancements.

It was seen that no such audit mechanism was in place in the State. The DC (P), J&K informed (June 2011) that necessary legal framework for conducting the energy audit of the designated consumers had been provided in the Energy Conservation Act 2011.

1.4.19 Monitoring by top Management

The Development Commissioner (P), J&K stated (June 2011) that MIS was being established under Part 'A' of R-APDRP for monitoring progress by the top management. However, various physical and financial parameters were being monitored through monthly/quarterly/yearly progress reports.

Under bipartite agreement for implementation of RGGVY between the Rural Electrification Corporation, GOI and the PDD on 9th September, 2005, the State Government had to specify quarterly milestones and progress thereof was to be reviewed jointly by REC and the authorised representative of the State Government in the quarterly Performance Review Meetings.

It was seen that neither any milestones were specified nor any quarterly performance review meetings held during the period 2006-11.

1.4.20 Conclusion

The aims and objectives of bringing about reforms in the Power Distribution Sector so as to provide reliable and quality power supply for all by 2012 by way of system upgradation, control and reduction of T&D losses and power thefts and by making the sector commercially viable as per National Electricity Policy and Plan were not achieved. The T&D losses, instead of decreasing had increased, the failure rate of distribution transformers had gone up and the arrears in revenue realisation had swelled during 2006-11. Implementation of Centrally Sponsored Programmes had suffered due to non-adherence to the stipulated time frames, slow/non-execution of essential components like consumer metering, capacitor installation, modernisation works etc., besides, idle/unfruitful and excess expenditure, blocking and diversion of funds. Project works under APDRP were not executed through pre-qualified turnkey contractors and most of the assets created were commissioned without prior issuance of fitness certificates. The activities under R-APDRP had not started fully as Part-B of the programme was still under finalisation process.

1.4.21 Recommendations

- ***The Department must prepare a long-term perspective plan for creation of infrastructural facilities for efficient distribution of electricity so as to cover maximum population in the State.***
- ***Additions in distribution network should be planned keeping in view the demand/connected load, anticipated new connections and growth in demand based on Electric Power Survey.***
- ***Physical and financial progress should be reviewed regularly on monthly/quarterly basis as per MOUs signed with the financing and executing agencies to avoid mismatch in achievement of the physical and financial targets.***
- ***Stipulated timeframe should be the essence of the contract for preventing time and cost overruns. For better transparency and accountability, the transmission and distribution sector should be unbundled into separate entities to look after the activities of transmission and distribution of power independently.***
- ***For revenue collection and maintenance of T&D works in rural areas under RGGVY, franchisees should be introduced without any further delay.***
- ***For monitoring, MIS mechanism should be strengthened.***