

CHAPTER IV
WORKS EXPENDITURE

SECTION "A"
(AUDIT REVIEW)

IRRIGATION AND FLOOD CONTROL DEPARTMENT

4.1 Review on Irrigation and Flood Control Department including Manpower Management

To provide assured irrigation to the farmers of the State, the department had taken up eight irrigation projects between 1973 and 1993 of which five had been completed and commissioned up to 1995 and one partially commissioned in 1991. Upto the end of the Ninth Plan period (March 2002) irrigation potential of 28,500 hectares was created by six projects of which, actual addition during the Ninth Plan period was only 350 hectares (one per cent of the targeted achievement). Due to reluctance of farmers, utilisation of irrigation potential as at the end of Ninth Plan period was only 15,300 hectares (54 per cent). Five flood control projects taken up between 1984 and 1992 remained incomplete as of March 2002.

Highlights

Out of a total provision of Rs.334.28 crore for the period 1997-2002, the department could spend only Rs.219.87 crore. Savings were mainly due to short-release of funds by the Government.

(Paragraph 4.1.5 (a))

Rupees 4.04 crore retained under 8449-Other Deposit between 1998-99 and 2000-01 remained unutilised as of March 2002.

(Paragraph 4.1.5 (b))

As against targeted creation of irrigation potential of 29295 hectares during the Ninth Plan only 350 hectares were created. The shortfall was mainly due to failure of canals of Loktak Lift Irrigation Project due to siltation of beds and non-completion of projects.

(Paragraph 4.1.8)

Due to non-commencement of construction work of a micro hydel project under Khuga Multipurpose Project, Ministry of Non-Conventional Energy Sources New Delhi asked the State Government to return the subsidy of Rs.25 lakh released so far along with penal interest.

(Paragraph 4.1.18)

Stores worth Rs.26.51 lakh deteriorated in the Project Store Division (Rs.15.08 lakh) and Store Division (Rs.11.43 lakh).

(Paragraph 4.1.35)

16 divisions incurred idle expenditure of Rs.14.25 crore during 1997-2002 on engaging 882 to 1500 work charged and muster roll labourers without any work.

(Paragraph 4.1.48)

Introduction

4.1.1 The State has a total geographical area of 22,327 square kilometres of which 2,230 square kilometres only are in the valley area. Of this, the net cultivable area is only 2.30 lakh hectares. It has an average annual rainfall of 1445 millimetres and water resource of 1.85 million hectares.

4.1.2 The Irrigation and Flood Control Department is responsible for providing assured irrigation to the farmers as well as tackling its flood problems.

Organisational set-up

4.1.3 The department is headed by a Chief Engineer who is assisted by 2 Additional Chief Engineers, 7 Superintending Engineers, one Superintending Surveyor of Works and 21 Executive Engineers.

Audit coverage

4.1.4 Records maintained in the offices of the Chief Engineer and 6 Executive Engineers¹ were test-checked during the review conducted from April to June 2002 covering 49 *per cent* (Rs.107.74 crore) of the expenditure incurred (Rs.219.87 crore) from 1997-98 to 2001-02.

Financial management

4.1.5 Budget allocation and expenditure incurred under two sectors—irrigation and flood control during the Ninth Plan Period (1997-2002) were as follows:

¹ Khuga Headwork Division, Khuga Spillway and Intake Division, Khuga Canal Division I, Thoubal Project Division I, Thoubal Project Division II and Flood Control Division IV.

Table No.4.1

(Rupees in crore)

Sector		Budget allocation	Expenditure	Savings (Percentage)
Irrigation	Revenue	40.32	18.01	22.31 (55)
	Capital	230.95	162.99	67.96 (29)
Flood Control	Revenue	50.08	29.23	20.85 (42)
	Capital	12.93	9.64	3.29 (25)
Total:		334.28	219.87	114.41 (34)

- (a) Savings were mainly due to reduced cheque drawal authority provided by the Finance Department.
- (b) A sum of Rs.6.98 crore was retained (1998-99 to 2000-01) under 8449– Other Deposits by the department. Of this, Rs.4.04 crore were not utilised as of March 2002.

Programme Management

Irrigation Projects

4.1.6 Between 1973 and 1993, the department had taken up eight irrigation projects. Out of this five had been completed and commissioned up to 1995 and one ongoing project (Thoubal Multipurpose) was partially commissioned in 1991. The remaining two² had not been completed (July 2002) mainly due to fund constraint.

4.1.7 Target for creation of irrigation potential during the Eighth and Ninth Plan periods and achievement there against are given in the table below:

² Khuga Multipurpose Project and Dolaithabi Barrage.

Table No.4.2

Sl.	Projects	Date of commencement	Date of commission	Eighth Plan target	Achievement	(Cumulative in hectares)	
						Ninth Plan target	Achievement
Completed							
1.	Khoupam Dam	1976	1980	1000	1000	1000	1100
2.	Sekmai Barrage	1975	1983	6750	6750	8500	6900
3.	Imphal Barrage	1975-76	1984	6400	6400	6400	6500
4.	Loktak Lift Irrigation	1974	1990	32000	6000	37000	6000
5.	Singda Dam (Multipurpose Project)	1975-76	1995	4100	4000	4100	4000
Ongoing							
6.	Thoubal Multipurpose	1980	1991	33400	4000	33400	4000
7.	Khuga Multipurpose	1983	—	—	—	15000	—
8.	Dolaithabi Barrage	1992-93	—	—	—	7545	—
Total:				83650	28150	112945	28500

4.1.8 Against the targeted irrigation potential of 29295 hectares (1,12,945 hectares minus 83650 hectares) during Ninth Plan period (1997-2002), actual achievement was only 350 hectares (28,500 hectares minus 28150 hectares) and irrigation facilities could be created in 12 *per cent* (28500/230000 hectares) of the cultivable area as at the end of March 2002. The shortfall was mainly due to failure of the canals of Lokak Lift Irrigation Project due to siltation of their beds during floods. According to the department (November 2000) desiltation could not be taken up due to paucity of funds.

Thoubal Multipurpose Project

Slow progress of the Project

4.1.9 The project aimed at creation of an ultimate irrigation potential of 33,400 hectares over a cultivable command area of 21,860 hectares, supply of 45.46 MLD (million litres a day) of drinking water to Imphal town and generation of 7.50 Megawatts of hydro power. The original estimated cost of Rs.47.25 crore (May 1980) was revised to Rs.254 crore during 1994. At the present price level it is estimated at Rs.390 crore (2001-02). The project scheduled to be completed in October 1994 is now rescheduled for completion by March 2007.

4.1.10 While the department had spent Rs.198.92 crore (51 *per cent* of the estimated cost of Rs.390 crore) on the project up to the end of Ninth Plan period the physical progress was as follows:

Table No.4.3

Components	Physical progress by the end of	
	March 1997	March 2002
	(in percentage)	
Earth dam	6	14
Spillway	9	25
Barrage	100	100
Canals	66	71
Distribution systems	50	50
Drinking water and power generation	Nil	Nil

4.1.11 The department attributed the slow progress to fund constraints, land acquisition and law and order problems. Slow progress of the implementation of project thus led to increase in estimated cost.

Closure of works taken up without technical approval

4.1.12 Between April 1996 and June 1996, the Executive Engineer, Task Force Division awarded 60 works relating to the canal system of the project (inspection path/road: 27, Drainage and protective works: 25, Minor and distributaries: 4, Removal of silt: 3 and Canal embankment: 1, Tender value: Rs.24.12 lakh) to contractors without technical approval of CE and without considering priorities and availability of funds. In October 1996, CE ordered closure of these works taken up without technical approval *etc.* By this time out of 60 works, 34 works were completed and remaining 26 works were executed to the extent of 20 to 90 *per cent* and total value of work done amounting to Rs.21.99 lakh was the outstanding liability of the department (December 1998).

4.1.13 Thus, award of work without technical approval of the competent authority was irregular and led to closure of works entailing a liability of Rs.21.99 lakh to the department.

Khuga Multipurpose Project

Slow progress of the execution of work

4.1.14 The project envisaged the creation of an ultimate irrigation potential of 15,000 hectares over a cultivable command area of 9575 hectares in Churachandpur and Bishnupur districts, supply of drinking water to Churachandpur town @ 22.73 MLD and to generate 1.75 Megawatts hydro power.

4.1.15 The original estimated cost of Rs.15 crore (1980) was revised to Rs.160.19 crore in March 1999 and was further revised to Rs.249.22 crore in 2001 (awaiting

approval) due to increase in labour cost, materials, land compensation and increase in volume of earthwork *etc.* The targeted date of completion (1987-88) has been re-fixed in April 2004.

4.1.16 While the department incurred an expenditure of Rs.147.19 crore as at the end of March 2002, the physical progress was as follows:

Table No.4.4

(In percentages)

Components	Physical progress by the end of	
	March 1997	March 2002
Earth dam	62	65
Spillway	65	72
Canals	73	84
Distribution systems	54	68
Power component (3x5000 kw)	40	70
Land acquisition	70	72

4.1.17 While expenditure constituted 92 *per cent* of the revised estimated cost of R.160.19 crore, physical progress varied between 65 and 84 *per cent*. The department attributed the slow progress to fund constraints, land acquisition and law and order problems and shortage of construction materials.

Non-utilisation of Central assistance

4.1.18 For setting up of a Micro Hydel Project of 250 kw (estimated cost: Rs.1.64 crore) in Churachandpur district under Khuga Multipurpose Project, Ministry of Non-Conventional Energy Sources (MNCES) sanctioned (March 1994) a capital subsidy of Rs.50 lakh and released Rs.25 lakh up to March 1996 with the condition *inter alia* to issue work orders within one year of the sanction. The work could not be taken up due to non-finalisation of construction drawings. In August 2001, MNCES cancelled the incentive of Rs.50 lakh for the micro hydel scheme and asked the Manipur Government to return the entire amount released (Rs.25 lakh) along with 6 *per cent* penal interest. The amount had not been refunded so far (July 2002).

4.1.19 Thus due to inaction of the department, Central assistance of Rs.25 lakh could not be availed.

Dolaithabi Barrage Project

Slow progress of execution of work

4.1.20 With the aim of providing an ultimate irrigation potential of 7545 hectares over a cultivable command area of 5500 hectares, construction of Dolaithabi Barrage Project was started in 1992. The original estimated cost (Rs.18.86 crore) was revised to Rs.63.10 crore in March 2000 and the original target date of completion (March 1997) was also changed to March 2005.

4.1.21 The department incurred an expenditure of Rs.19.88 crore up to the end of Ninth Plan period while the physical progress was as follows:

Table No.4.5

Components	Estimated quantity	Progress by the end of March 2002	
		Quantity	Percentage
Land acquisition	190.69 ha	67.74 Ha	36
Earth works in			
Diversion Channel	1.62 LCM ³	1.10 LCM	68
Hill Spur Cutting	1.69 LCM	0.82 LCM	49
Barrage Foundation	2.18 LCM	1.50 LCM	69
Steel procurement	5317 MT	133 MT	3
Guide Bunds	1.01 LCM	0.48 LCM	48

4.1.22 As per departmental records buildings and roads were constructed up to 90 per cent and 70 per cent respectively till the end of March 2000. No progress was made thereafter. Works on the coffer dam, barrage foundation siltation, cement concreting, gates, canals and distribution systems were not taken up at all (April 2002).

4.1.23 Reasons for tardy progress were attributed by the department to contractual problems and inadequate outlays. Against a total demand of Rs.65.26 crore for completion of the project during the Ninth Plan period (1997-2002), budgetary support of Rs.22.75 crore only was provided and due to reduced check drawal authority the department could spend only Rs.13.27 crore during the Ninth Plan period.

³ LCM—Lakh cubic metres

Singda Micro Hydel Project

Singda Multipurpose Project planned to

- (a) augment the Imphal water supply scheme by 18.18 MLD
- (b) provide an annual irrigation of 4100 hectares, and,
- (c) generate 750 kilowatt of hydel power.

4.1.24 The water supply and irrigation components of the project had already been commissioned during June 1995. Construction of the micro hydel component (750 kw) was going on during the Ninth Plan period.

4.1.25 The original estimated cost of micro hydel component of Rs.2.48 crore (1992) was revised to Rs.4.20 crore in March 1998 due to increase in cost of labour and material. The completion of the project, initially scheduled for March 1999, had been rescheduled to June 2002. The scope of the work included (i) construction of power house, (ii) construction of tail race channel, (iii) water conductor system, (iv) land development, (v) engine foundation, and, (vi) procurement and commissioning of electro mechanical parts *etc.*

4.1.26 Although the department incurred an expenditure of Rs.3.31 crore till the end of Ninth Plan, the project remained incomplete (March 2002), as 30 *per cent* of construction of tail race channel, 20 *per cent* of the second stage concreting of the engine foundation and laying of cables in the cable trenches were not completed (May 2002).

Utilisation of irrigation potential

4.1.27 Although a total annual irrigation potential of 28500 hectares was created till the end of Ninth Plan period, the farmers were reluctant to adopt multiple cropping and unwilling to pay the water tax readily and as a result potential of 15300 hectares (54 *per cent*) only had been utilised annually. In November 2001, the Chief Engineer stated that repairs and maintenance of Khoupum Dam Project commissioned in 1980 and Loktak Lift Irrigation Project commissioned in 1990 would be a waste of public money as they did not give any benefit to the farmers. As a follow-up-action the department ordered (November 2001) immediate suspension of the operation of the two pump houses of Loktak Lift Irrigation Project.

FLOOD CONTROL SECTOR

Flood Control Projects

Delay in completion of projects

4.1.28 Between 1984 and 1992, the department undertook five flood control projects viz. (a) Merakhong FC, (b) Wangjing FC, (c) Nambol FC Phase I, (d) Nambol FC Phase II, and, (e) Waishel Drainage for completion within three working seasons. The main components of work under the project were resectioning of the narrow sections of the rivers, construction of new embankment, raising the existing low level of embankments, providing protection works at sharp curves and weak banks and construction of structures to drain out inundated waters. While each of the five projects was to be completed within three working seasons, the physical progress ranged between 25 to 75 per cent even after a lapse of 10 to 18 years of their commencement as shown below:

Table No.4.6

Projects	Estimated cost		Year of commencement	Physical progress (March 2002) (Percentages)
	Original	Revised		
	(Rupees in crore)			
1. Merakhong FC (0.00–16.45 kms)	1.16 (1982)	4.28 (1996)	1984	Resectioning and Embankment–70 Bridges–50
2. Wangjing FC (0.00–17.05 kms)	1.18 (1988)	4.50 (1996)	1989	61
3. Nambol FC (0.00–10 kms) Phase I	1.97 (1991)	11.15 (1999)	1992	25
4. Nambol FC Phase II (23.00–26.70 kms)	0.64 (1992)	1.00 (2000)	1992	60
5. Waishel Drainage (11.42–19.60 km)	0.49 (1992)	1.96 (1996)	1992	Resectioning and Embankment–75 Bridges–100

(The revised estimates were not yet approved)

4.1.29 The department attributed the reasons for the delay in completion of the projects to non-finalisation of land acquisition cases and reduced cheque drawal authority. As against the provision of Rs.12.93 crore during 1997-98 to 2001-02, the department could only spend Rs.9.64 crore during the period. Out of the targeted protection of 10,000 hectares during 1997-2002, the department achieved 1800 hectares during 1997-98 and 1998-99. Achievement for the last three years was not on record.

Wangjing River Flood Control Project

Stoppage of works due to non-finalisation of land compensation cases

4.1.30 The Government sanctioned the Wangjing River Flood Control Project in January 1988 and the department awarded (June 1989) earthwork (from RD 7.535–16.545 km) to a contractor at Rs.71.04 lakh for completion by June 1992 (later extended to September 1994).

4.1.31 The Superintending Engineer concerned initiated the land acquisition process belatedly in December 1993, but in the course of execution of work, the land owners objected to the execution of work due to non-payment of compensation for their land. As a result, contractor could not proceed with the work after executing 57 per cent of the work (value: Rs.40.81 lakh) and the department proposed (January 1996) closure of contract. As Government approval for closure had not been received the contract still remained unclosed (July 2002).

Stores management

4.1.32 The department procured construction materials centrally through two divisions, viz. Project Stores Division for the irrigation sector and Stores Division for the flood control sectors.

4.1.33 Materials procured and issued by the two divisions during the Ninth Plan Period were as follows:

Table No.4.7

(Rupees in lakh)

Division	Opening balance (April 1997)	Procurement (1997-2002)	Issues (1997-2002)	Closing balance (March 2002)
Project Stores Division	83.48	440.60	396.21	127.87
Stores Division	83.25	1259.36	576.37	766.24
Total:	166.73	1699.96	972.58	894.11

4.1.34 Due to excessive procurement of materials the closing balance was increasing adversely affecting the financial position and locking up funds.

Slow moving/deteriorated stores

4.1.35 Analysis of the closing balance revealed that there were slow-moving and deteriorated stores worth Rs.41.07 lakh and Rs.26.51 lakh respectively as given below:

Table No.4.8

(Rupees in lakh)

Name of the Division	Slow-moving	Deteriorated
Project Stores Division	36.90	15.08
Stores Division	4.17	11.43
Total:	41.07	26.51

4.1.36 The Government has not yet sanctioned the write-off of the deteriorated stores (July 2002) as proposed by the department.

Physical verification and reserve stock unit

4.1.37 Physical verification of stores was not conducted in Project Stores Division. In Stores Division physical verification of store was conducted during January, February, October and November 2000, but the verification reports could not be made available to Audit.

4.1.38 Reserve stock limits were not fixed by the Government. Consequently there was no control on the procurement, issues and balances held.

Machinery management

4.1.39 The department had 221 machines and vehicles (190 purchased by charging the projects).

4.1.40 Of these, by the end of March 2002, 122 were not in working condition, miscreants had taken away one and status of 20 was not ascertainable. Of the 122, the department had condemned 15, but no action was taken on the balance either for their repairs or condemnation.

4.1.41 Test-check revealed that 60 of them had been lying under break-down conditions from the periods shown below:

Table No.4.9

	(In number)
1982-90	7
1991-95	21
1996-2000	28
2001	4

Utilisation of machinery

4.1.42 Utilisation of project machinery was extremely poor. During the five years (1997-2002), the department put to use 14 of the machines of Thoubal Multipurpose Project on an average of one to 21 days in a year and earned a meagre revenue of Rs.43.58 lakh as shown below:

Table No.4.10

(Rupees in lakh)

Machinery	Revenue earned (1997-2002)	Number of days worked (1997-2002)	Average number of days worked per year per machinery
D50 dozer — 3 Nos.	16.19	225	15
D80 dozer — 2 Nos.	7.01	113	11
D65 dozer — 2 Nos.	3.33	38	4
90CK Poclain — 2 Nos.	13.44	207	21
170CK Poclain — 1 No.	3.43	43	9
Road Roller — 3 Nos.	0.10	7	1
Turbo Truck — 1 No.	0.08	3	1
Total:	43.58		

4.1.43 The trend of deployment revealed that machinery of the project had been purchased far in excess of their actual requirements. Earning Rs.43.58 lakh on 14 machines in five years is unsatisfactory.

Manpower management

Engagement of excess staff

4.1.44 Excluding the staff of Additional Chief Engineer-I for which the department could not furnish any information, sanctioned strength and men-in-position of the regular employees of the department were as follows:

Table No.4.11

Grade	As on 1.4.1998		As on 31.3.2002	
	SS	MIP	SS	MIP
Grade-I	117	113	120	111
Grade-II	3	1	3	—
Grade-III	774	751	1305	1351
Grade-IV	236	224	514	559
Total:	1130	1089	1942	2021

(SS—Sanctioned Strength, MIP—Men-in-Position)

4.1.45 Between April 1998 and March 2002 the department engaged 91 persons in excess of the sanctioned strength (Grade-III—46 persons and in Grade-IV—45 persons) which had not been regularised as of March 2002.

Excess engagement of work-charged and muster roll staff

4.1.46 Excluding the staff of Khuga Headwork Division, for which the department could not furnish any information, the sanctioned strength and the employed strength of the department were as follows:

Table No.4.12

Category	As on 1.4.1998		As on 31.3.2002	
	SS	MIP	SS	MIP
Work-charged	693	933	44	65
Muster Roll	876	1115	952	1262
Total:	1569	2048	996	1327

4.1.47 The excess over the sanctioned strength ranged from 331 to 479 during the years 1998-99 to 2001-02.

Engagement of work-charged and muster roll staff without any work

4.1.48 16 divisions of the department stated (June/July 2002) that they did not have any departmentally executed construction or maintenance works during the period 1997-2002 although they had been employing 882 to 1500 work-charged and muster roll staff by spending a total amount of Rs.14.25 crore on their remuneration and wages. Thus the entire expenditure was infructuous (*Appendix–XVI*).

Monitoring

4.1.49 The implementation of both irrigation and flood control projects was not adequately monitored at the State level. As a result, three irrigation projects and all the five flood control projects referred to in paragraph nos. 4.1.9, 4.1.15, 4.1.20 and 4.1.28 remained incomplete leading to revision of cost from Rs.1.47 crore to 234.22 crore.

Conclusion

4.1.50 Programme management of the department was not satisfactory as it could create irrigation facilities only in 12 *per cent* of the total cultivable areas. The low achievement was mainly due to lack of adequate budget. Measures taken up under flood control management also suffered from fund constraints and funds to the tune of Rs.8.94 crore was locked up due to excessive procurement of material. The department also engaged excess and idle manpower which adversely affected its finances.