### **CHAPTER II: MINISTRY OF URBAN DEVELOPMENT**

### 2. Delhi Development Authority

**Development of Land by the Delhi Development Authority** 

### **Highlights**

Delhi Development Authority (DDA) spent Rs. 2,061.56 crore during the period 2000-01 to 2004-05 on various land developmental schemes which included construction of master plan roads, development of green belts, leveling and dressing of land, construction of water supply facilities, etc. Performance audit of six such schemes involving expenditure of Rs. 605 crore during the five years period revealed lack of financial control over expenditure, non-adherence to codal provisions in award of works and lack of co-ordination with other concerned civic and public utility agencies which resulted in undue delays as well as extra expenditure.

Construction of command tanks and water reservoirs was not linked with the actual availability of water so as to enable their utilization. Consequently, expenditure of Rs. 33.78 crore incurred on construction of these tanks and reservoirs was rendered idle due to lack of water.

(Paragraphs 2.9.1 & 2.9.2)

Expenditure of Rs. 19.56 crore was incurred in anticipation of administrative approval and expenditure sanction which was irregular.

(*Paragraph 2.6.2*)

Lack of adequate scrutiny of tender rates and comparison with rates accepted for similar works during the same time resulted in additional expenditure of Rs. 7.43 crore.

(*Paragraph 2.7.1*)

DDA failed to ensure adherence to codal provisions relating to ensuring availability of drawings, design and materials as well as clear site before award of works. This resulted in delay in completion of works ranging up to over three years as well as cost escalation of Rs. 7.29 crore.

(Paragraph 2.7.3)

### **Summary of recommendations**

Institutional mechanisms should be strengthened to ensure adequate co-ordination both at the planning stage as well as in the

implementation phase with other civic planning and public utility agencies so that creation of public infrastructure and facilities by DDA are in consonance with the plans and projections of the connected civic agencies and the progress of works under execution is not hampered.

- No works should be awarded or commenced without prior administrative approval and expenditure sanction by the competent authority. DDA should also ensure availability of clear and unhindered site before award of work.
- A mechanism should be evolved whereby the rates offered for works are compared with rates accepted for similar works within the same time frame so as to ensure that no undue payments occur and the financial interests of DDA are secured.
- Pelays attributable to omission and commission on the part of divisional officials and leading to escalation in costs or extra payments to contractors should be investigated with a view to fixing responsibility.
- Internal audit should be strengthened so as to ensure coverage of all major schemes being executed by DDA.

### 2.1 Introduction

The Delhi Development Authority (DDA) was established in 1957 to promote the planned development of Delhi. During the period from 2000-01 to 2004-05, DDA spent Rs. 2,061.56 crore on development of land under various developmental schemes. The specific works undertaken under these schemes included construction of master plan roads, development of green belts, leveling and dressing of land, construction of storm water drains, internal drains and water supply lines, construction of connected underground water tanks and pump houses and maintenance works.

### 2.2 Organisational set up

The DDA is headed by the Lt. Governor of Delhi. Day to day administration of the Authority is vested in the Vice Chairman who is assisted by the Member (Finance) and the Member (Engineering). Land acquisition matters are handled by the Commissioner (Lands) assisted by the Director (Land Management) while planning for the various developmental schemes is done by the Commissioner (Planning) assisted by zone wise Directors (Planning). Execution of the schemes is through the six zonal Chief Engineers who function under the administrative control of the Member (Engineering). The Chief Engineers are assisted by Superintending Engineers at the circle and Executive Engineers at the divisional levels.

## 2.3 Audit objectives

The primary objective of the performance audit was to see whether the schemes and the specific works for development of land conformed to the Master Plan and whether they were executed efficiently and economically in pursuance of the stated objectives. This was divided into the following sub-objectives:

- Whether adequate financial controls were in position to ensure that the works were being executed in accordance with the sanctions;
- Whether the works were being awarded and thereafter executed in accordance with the stipulated codal provisions and instructions;
- Whether the works were being properly planned and co-ordinated so as to ensure optimum utilization of available resources and reaching of the benefits of the project to the intended beneficiaries;
- Whether the progress of works were being monitored so as to ensure that they were being executed in accordance with the terms of the contracts; and
- Whether adequate system of internal control and maintenance of the quality of the works were in place.

# 2.4 Acknowledgement

The draft performance audit report was sent to DDA as well as the Ministry in August 2005. It was discussed with the Member (Finance) of DDA along with other concerned officials at a meeting held on 14 October 2005. The views expressed at the meeting as well as those communicated formally by DDA in December 2005 have been incorporated in the report. The comments of the Ministry were not received as of December 2005.

### 2.5 Scope and methodology of audit

Expenditure on 19 developmental schemes exceeded Rs. 10 crore each out of the total expenditure of Rs. 2061.56 crore incurred during the five years from 2000-01 to 2004-05. Of these, six schemes involving a total expenditure of Rs. 605 crore were selected for detailed appraisal namely, (i) development of 1769.88 hectares of land for housing colonies at Pappan Kalan in Dwarka Phase I, (ii) construction of master plan road in Dwarka Phase I, (iii) maintenance of parks and plantation activities in the north zone, (iv) development of 224.90 hectares of land for residential colonies in Dwarka Phase II; (v) construction of master plan road in Dwarka Phase II; and (vi) development of 472.40 hectares of land for housing colonies in Sectors 23,24 and 25 in Rohini. The total expenditure on these six selected schemes constituted about 29 *per cent* of the total expenditure incurred by DDA on such schemes during the five years period.

The audit methodology involved scrutiny of records relating to execution of the selected schemes during the period from 2000-01 to 2004-05 in the respective zones along with those at the headquarters of the DDA, communicating the preliminary audit findings to the appropriate field authorities of the DDA for confirmation of facts and soliciting their comments and thereafter taking those into account while finalising the audit conclusions.

# 2.6 Financial management and control

### 2.6.1 Budget allocation and expenditure

The budget allocation for and expenditure on the six selected schemes during the five years from 2000-01 to 2004-05 were as below:

(Rupees in crore)

Name of the scheme	Development of 1769.88 Hect. of land at Dwarka Ph I		Development of Land at Dwarka Ph II (224.90 Hect. of land)		Construction of Master plan road of 45 to 60 M wide road Ph I & Ph II *		Development of 472.40 hect. of land in Sector-23, 24,25 Rohini		Maintenance of parks, plantation & equipment of Hort. Wing of the North zone	
Year of Start	tart 1990-91		1996-97		2001		1993		Annual Maintenance Scheme	
	Alloca- tion	Expend- iture	Alloca- tion	Expend- iture	Alloca- tion	Expend- iture	Alloca- tion	Expend- iture	Alloca- tion	Expend- iture
Expenditure incurred upto 31 <sup>st</sup> March 2000		283.97		12.47		Nil		141.70		Not applica- ble
2000-01	48.15	48.98	15.10	14.88	2.50	2.80	14.00	13.84	12.40	12.06
2001-02	61.16	56.52	18.68	18.68	59.00	58.93	10.30	11.57	12.80	12.78
2002-03	81.00	69.79	22.35	20.69	60.00	57.50	9.65	4.02	12.89	12.86
2003-04	38.55	34.50	17.99	10.97	23.00	19.88	21.03	13.48	15.82	14.88
2004-05	40.00	39.96	11.25	9.12	7.80	6.17	17.90	20.24	20.46	20.16
Total		249.75		74.34		145.28		63.15		72.74

<sup>\*</sup> Two schemes clubbed into one.

There were savings ranging upto 58.34 *per cent* during the five years under review. Savings exceeded 10 *per cent* in respect of the five developmental schemes during the years from 2002-03 to 2004-05. DDA attributed (December 2005) the savings to "unavoidable hindrances". The reply is not acceptable since the savings arose every year which was indicative of either inadequate planning and unrealistic estimations or poor implementation of works.

# 2.6.2 Lack of financial control over expenditure

Codal provisions<sup>1</sup> stipulate that no expenditure should be incurred without prior administrative approval and sanction of the competent authority. Moreover, award or execution of works should be based on technical sanction

-

<sup>&</sup>lt;sup>1</sup> Section 2.1 of CPWD Works Manual

accorded by the competent technical authority. The purpose of these provisions is to ensure that expenditure is incurred only after allocation of funds has been decided for the purpose and works are thereafter executed in accordance with pre-determined specifications and standards. Audit noted that expenditure of Rs. 19.56 crore was incurred in the following cases in anticipation of administrative approval and expenditure sanction thereby undermining financial control:

Sl. No.	Name of Work	Date of award of work	Tendered amount (Rupees in crore)	Date of administrative approval & expenditure sanction	Expenditure incurred before administrative approval & expenditure sanction (Rupees in crore)
1.	Strengthening of the existing two lanes carriage way, construction of additional four lanes, service road, foot path, drainage, X-drainage work and fixing of kerb stones, etc. at Dwarka Project, Phase-II, Group-I	February 2001	33.81	November 2001	6.10
2.	Strengthening of the existing two lanes carriage way, construction of additional four lanes, service road, foot path, drainage, X-drainage work and fixing of kerb stones, etc. at Dwarka Project, Phase-I, Group-III	February 2001	24.50	November 2001	4.45
3.	Strengthening of the existing two lanes carriage way, construction of additional four lanes, service road, foot path, drainage, X-drainage work and fixing of kerb stones, etc. at Dwarka Project, Phase-I, Group-I	February 2001	29.91	November 2001	3.83
4.	Strengthening of the existing two lanes carriage way, construction of additional four lanes, service road, foot path, drainage, X-drainage work and fixing of kerb stones, etc. at Dwarka Project, Phase-I, Group-II	February 2001	25.98	November 2001	5.18
	Total				19.56

Further, there were delays ranging from 10 months to over three years in completing these works along with cost escalation as commented in para 2.7.3.

DDA stated (December 2005) that the works were taken up as an exception in anticipation of administrative approval and expenditure sanction in order to ensure that the area of the site was accessible and people could move into their offices. The reply is not accurate as scrutiny of records indicated that execution of these works was held up due to unresolved funding issues with the Delhi Government. This only emphasizes the need for obtaining proper approvals before commencement of the work.

### Recommendation

No works should be awarded or commenced without prior administrative approval and expenditure sanction by the competent authority.

### 2.7 Award of works

Works are awarded by DDA in accordance with the provisions of the CPWD Works Manual<sup>2</sup>. A review of the award of works under the six selected schemes revealed non-adherence to codal provisions which undermined the credibility of the award process and resulted in delay in completion of the works as well as escalation of costs as detailed in the following paragraphs.

### 2.7.1 Award of works at higher rates without adequate justification

Tenders for works are to be scrutinized by the Division concerned and its recommendations for acceptance of a tender and award of the work submitted to the zonal Chief Engineer for approval. Works valued at more than Rs. 2.50 crore have to be submitted by the Chief Engineer to the Works Advisory Board for approval. Scrutiny of the tenders includes an assessment of the rates offered and it is incumbent upon the divisional officers concerned to ensure that the rates recommended for approval are fair as well as consistent with that approved for similar works at the same time.

A scrutiny of award of three works relating to strengthening of roads revealed that works were awarded at rates higher than that of a similar work awarded at the same time in Dwarka Phase I Group I as tabulated below:

Sl. No.	Name of work	Estimated cost (Rupees in crore)	Tendered amount after negotiation (Rupees in crore)	Percentage awarded above estimated cost	Percentage awarded above estimated cost in Dwarka Phase I Group I	Percentage difference between work awarded and that in Dwarka Phase I Group I	Cost difference (Rupees in crore)
1.	Strengthening of roads at Dwarka Phase II Group I	30.33	33.81	11.46	1.30	10.16	3.08
2.	Strengthening of roads at Dwarka Phase I Group III	22.28	24.50	9.98	1.30	8.68	1.93
3.	Strengthening of roads at Dwarka Phase I Group II	23.25	25.98	11.72	1.30	10.42	2.42

Such award of works at higher rates resulted in an additional expenditure of Rs. 7.43 crore and undue benefit to the contractor.

DDA stated (December 2005) that though the names of the works were similar, the actual site condition, scope and quantum of work differed in all the cases. It was added that the contractor had inadvertently quoted a rebate of

.

<sup>&</sup>lt;sup>2</sup> Sections 14 to 19

14.1 *per cent* on the quoted rates. Moreover, rates received in one case should not be construed to form an opinion about the prevailing market rates in other cases.

The reply is not tenable as all the works were at Dwarka with broadly similar site conditions and two of these works were in fact awarded to the same agency. All of them related to Master Plan roads comprising of roads, bridges and culverts and were awarded in the same month. Audit compared the detailed schedule of items and confirmed that the nature of the items of work were identical in all the cases. In fact, the number of items was less in those works for which higher rates had been awarded. Further, the number of bridges required etc. should have been clearly quantifiable and in case more earth work was to be done, this would have been accounted for through increase in the quantum or scope of the specific item of work.

# 2.7.2 Award of work without ensuring availability of structural drawing and material

The CPWD Works Manual<sup>3</sup> provides that no tender shall be invited unless stipulated material are available or are likely to be received before the work commences and essential architectural and structural drawings together with specifications are ready for being made available to the contractor at the time of invitation of tenders. The work of construction of a peripheral storm water drain in sectors 1 and 2 of Dwarka was initially awarded to a contractor in September 1996 for completion by October 1997. As the firm failed to complete the work, the contract was rescinded and the remaining work awarded in October 2003 to another contractor at tendered amount of Rs. 96.09 lakh for completion by 17 July 2004. The work was finally completed in September 2005 after lapse of more than one year due to non-availability of structural drawings and non-availability or short supply of steel and cement which were to be supplied by the department.

DDA stated (December 2005) that all the structural drawings were available at the time of calling of the tender. Subsequently, the Works Advisory Board directed a change in the specifications of the cement to be used based on revised I.S Code for RCC works. This necessitated revision of the structural drawings causing the delay. It was added that the delay was exacerbated by a steep rise in the cost of steel and cement during that time. The reply is not valid because the IS Code was revised in July 2000 whereas the remaining work was awarded in October 2003. Hence, the structural drawings should have been prepared as per the revised I.S code before the award of the work to the contractor. Moreover, it was incumbent upon the DDA to ensure availability of the materials before commencement of the work.

.

<sup>&</sup>lt;sup>3</sup> Section 15.2.1.3

### 2.7.3 Award of works without ensuring availability of clear site

The CPWD Works Manual<sup>4</sup> provides inter alia that availability of clear site, funds and approval of local bodies should be ensured before approval of the Notice Inviting Tenders (NIT). The purpose of these provisions is to ensure that works once awarded are executed without any hindrance or delay which may entail escalation in costs.

(i) The work of strengthening of the existing two lane carriageway, construction of additional four lane service road, footpath, drainage works and certain bridges and culverts at Dwarka Phase-II Group-I was awarded to a firm in February 2001 at its tendered amount of Rs. 33.81 crore for completion by 10 February 2002. The work was actually completed on 29 December 2003. The delay was on account of hindrances due to IOC pipe line running below the site, electric duct, deep sewer works in progress, shifting of electric pole and MTNL cable, non-availability of drawing of a bridge and stoppage of work due to VVIP visit. However, the concerned Chief Engineer had assured the Works Advisory Board at the time of its approval in November 2000 that the site was available for the work. A sum of Rs. 1.87 crore was paid to the contractor on account of these delays under clause 10CC of the agreement.

DDA stated (December 2005) that a clear site is not always available and work is often commenced on available portions of the site and action initiated simultaneously to clear the hindrances. In the instant case, the work was delayed due to the existence of an IOC pipeline running below the site which ultimately necessitated change in the alignment of the road. Further, there would in any case been a cost escalation of about Rs. 1.06 crore even had the work been completed during the stipulated time.

The reply is not tenable as existence of the pipeline and the need to change the alignment of the works would have been apparent had there been a proper site survey before commencement of the work. Moreover, delay was also caused by other hindrances which could have been avoided or minimized with better co-ordination and pursuance with other utility service providers. Further, the cost escalation mentioned by the department was hypothetical and was on account of rise in the cost of labour and materials and it in no way justifies delays caused by such poor planning and co-ordination.

(ii) Similarly, the work of strengthening the existing two lane carriageway and construction of additional four lanes, service road, footpath, drainage works, bridges, culverts, etc. at Dwarka Project Phase I Group-III was awarded to a firm in February 2001 at the tendered amount of Rs. 24.50 crore for completion by 12 February 2002. However, the work was actually completed on 31 December 2002. The delay was attributable inter alia to delay in shifting of electric poles, non-existence of storm water drains which delayed construction of foot paths, leakage in water lines at different locations and failure to finalize the lay out of inter-sections of the roads. Consequently,

-

<sup>&</sup>lt;sup>4</sup> Section 15.2.1.3

Rs. 77.04 lakh was paid to the firm up to December 2002 under clause 10CC of the agreement. The Executive Engineer South Western Division 7 stated in July 2005 that the delay was due to existence of electricity and telephone poles, existence of trees on the alignment etc. which had to be cleared by DDA before the road work could be taken up.

DDA stated (December 2005) that while they made efforts to clear the hindrances, it was difficult as other agencies were involved which are not under the administrative control of DDA. Hence, there is no alternative left but to clear the hindrances with extra cost by way of paying escalation under the relevant clause of the agreement. The reply is not acceptable as DDA should have taken up the matter effectively with the other civic agencies at appropriate levels. Moreover, factors like non-availability of lay-out plans were internal to DDA and should have been settled before award of the work.

(iii) The work of strengthening the existing two lane carriageway, construction of additional four lanes, service road, footpath, drainage works, bridges, culverts and pavements at Dwarka Project Phase I Group-I was awarded to a firm in February 2001 at the tendered amount of Rs. 29.91 crore for completion by 12 February 2002. The work was actually completed on 6 January 2004. The delay was again attributable to non-availability of drawings for inter-section and T-junction crossing of MP Road and existence of a PWD site office in the line of the alignment. As the reasons were attributable to lack of adequate coordination on the part of DDA, an amount of Rs. 1.33 crore was paid to the firm for the period up to January 2004 as cost escalation under Clause 10CC of the agreement.

DDA stated (December 2005) that full efforts were made to get these hindrances removed and that there was no lack of coordination on their part. The reply is not valid as DDA should have ensured availability of the drawings before award or commencement of the works.

(iv) The work of development of land at Dwarka Phase I that involved covering of the Palam drain between road 6184 to 3841 and the construction of a 45 metre wide road was awarded to a firm in October 2000 at its tendered amount of Rs. 37.21 crore for completion by 20 October 2002. However, the work was still in progress as of August 2005. Audit noted that the delay was due to non-supply of structural drawing for about six months coupled with encroachment on the land. Consequently, the firm was paid Rs. 2.39 crore for the delay under clause 10CC for the period up to January 2005.

DDA stated (December 2005) that the land in question belonged to the Irrigation & Flood Control (I&FC) department of the Government of Delhi who had to hand over the land. Work was also stopped for three to four months for the monsoons. The structural drawings, after being finalized by Central Road Research Institute who were the consultants for the project, were issued to the contractor after award of the work. But they required certain clarifications which took considerable time. Hence, the hindrances were beyond the control of the Authority. The reply is not acceptable as DDA

should have taken timely action to resolve pending issues with the I&FC department and to ensure that the drawings were finalized by the time of award of the work. The occurrence of the monsoons is an annual phenomenon and should have been taken into account while planning the work.

(v) The work of strengthening of existing two lane carriage way, construction of additional four lanes, service road, footpath, drainage, Xdrainage work etc. and construction of a bridge connecting sectors 6-10 to 5-11 in Dwarka Phase I Group II was awarded to a firm in February 2001 at its tendered amount of Rs. 25.98 crore to be completed in February 2002. The work except the bridge was completed in April 2005. Expenditure of Rs. 1.15 crore was incurred on construction of the abutments and piers of the bridge which remained incomplete as of December 2005. Audit noted that the primary reason for the delay in execution of the work was non-removal of a power line crossing the site and delay in taking a decision on a service road to the nearby Bharat Vandana Park. The high tension power line posed danger of electrocution to the construction workers at the site as well as to vehicles that would ply on the bridge and hence its removal was necessary before the work could be executed. However, the matter of shifting of the HT line was taken up by the divisional authorities with the Delhi Transco Ltd. (DTL) only in September 2001, i.e. after award of the work while a decision on the service road was taken only in December 2003. These delays resulted in payment of Rs. 93.42 lakh to the contractor up to February 2004 for the road works and non-completion of the bridge despite expenditure of Rs. 1.15 crore.

DDA stated (December 2005) that it had been presumed at the time of preparation of the estimate that the top of the bridge would be at the same level as that of the road. However, at the time of preparation of the detailed drawings by the consultant, it transpired that the height of the bridge would be much more than that of the road and there was danger of electrocution from the overhead HT line. This could not be foreseen at the time of award of the work. DTL was subsequently requested many times to raise the HT line which was finally done on 30 April 2005. In the meantime, the balance portion of the bridge work was withdrawn from the scope of the work and the contract with the agency closed on 15 April 2005. Fresh tenders have now been invited for the balance portion of the bridge work.

The reply is indicative of poor planning and lack of technical foresight and timely site survey. The designs of the bridge should have been finalized before award of the work that would have clearly revealed the need to shift the HT lines hence promoting timely action.

Thus, failure of DDA to ensure clear site and removal of all hindrances before award of works as envisaged in the codal provisions and ineffective coordination with the civic agencies resulted in delay in execution of works by 10 to 38 months and cost escalation of Rs. 7.29 crore.

### Recommendations

- A mechanism should be evolved whereby the rates offered for works are compared with rates accepted for similar works within the same time frame so as to ensure that no extra payments occur and the financial interests of the Authority are secured.
- DDA should ensure strict adherence to the codal provisions of ensuring clear and unhindered site before award of work.
- DDA could establish a co-ordination mechanism with other civic agencies and public utilities so as to ensure that hindrances are expeditiously removed.
- Delays attributable to lapses or inaction on the part of divisional officials and leading to escalation in costs or extra payments to contractors should be investigated with a view to fixing responsibility.

# 2.8 Contract management

It is incumbent upon the executing authorities to ensure that the terms of the contract entered into with the contractors and the specifications of the works are strictly adhered to and enforced. Any laxity in this regard exposes DDA to the possibility of undue delay in completion of works, poor quality of works done as well as undue payments to the contractors.

### 2.8.1 Inadmissible payments due to non-adherence to specifications

Condition No 135 of the additional conditions of the agreement for construction and maintenance of roads stipulate inter alia that specifications of the Union Ministry of Surface Transport (MOST) should be followed in the absence of any specific or particular specification attached in the tender documents. Clause 504.8 of the MOST specifications provide that the contract unit rate for a work shall be paid in full for carrying out all the required operations and no separate payment should be made for primer coat/tack coat.

(i) Scrutiny of the work relating to Master Plan Road Phase-I Group-III Dwarka revealed that an amount of Rs. 32.68 lakh had been released during December 2001 to June 2004 for payment to the contractor for primer coat/tack coat though there was no such stipulation or requirement in the schedule of quantities attached to the tender documents/agreement. Hence, no separate payment was to be made for primer coat/tack coat and it should have been included in the unit rate of the work as a whole as had also been clarified by the Chief Engineer in November 2004.

DDA stated (December 2005) that an amount of Rs. 32.68 lakh had been withheld and action would be taken on receipt of reports from the Vigilance department and the Chief Technical Examiner (CTE).

(ii) Similarly, an amount of Rs. 40.14 lakh was separately paid during December 2001 to December 2003 to the contractor during execution of work of Master Plan Road Phase-I Group-I Dwarka for tack coat/primer coat though there was no such stipulation in the tender documents/agreement. Both the CTE as well as the Chief Engineer had clarified in November 2004 that the amounts were not payable.

DDA informed (December 2005) that an amount of Rs. 46.48 lakh had been withheld upto the 22<sup>nd</sup> Running Account bill and action would be taken on receipt of reports from the CTE and the Vigilance department.

# 2.8.2 Injudicious reversal of decision to rescind contract resulted in delay as well as non-recovery of Rs. 28.03 lakh from contractor

Work of construction of peripheral storm water drain in sectors 1 and 2 of Dwarka was awarded to a firm at its tendered amount of Rs. 1.46 crore with stipulated date of start and completion as 8 October 1996 and 7 October 1997 respectively. The work was rescinded on 5 August 1998 on the ground of delay in completion of the work. Relying on assurances given by the firm as to expeditious completion of the work, it was subsequently decided with the approval of the Chief Engineer on 7 June 2001 to revoke the decision to rescind the contract and allow the contractor to resume the work. However, the firm could not complete the work and the contract was finally rescinded on 1 March 2003 at the risk and cost of the contractor. In the meantime, over five years had elapsed since the stipulated date of completion.

Work worth Rs. 1.14 crore had been completed by the contractor at the time of final rescinding of the contract. The balance of the work was awarded to another firm in October 2003 at their tendered amount of Rs. 96.09 lakh against estimated cost of Rs. 84.15 lakh at the risk and cost of the original firm. The work was completed in September 2005.

Audit noted that the decision of DDA to reverse the rescission of the contract proved to be injudicious as it was made without a realistic assessment of the capabilities, track record and intention of the firm. This resulted in avoidable delay in completion of the work as well as further escalated the cost. An amount of Rs. 28.03 lakh including compensation leviable under the terms of the contract and the risk and cost amount remained to be recovered from the first contractor.

DDA stated (December 2005) that the decision to reverse the rescission of the contract was approved by the Work Advisory Board on the basis of assurances given by the contractor which he failed to subsequently live up to. Action for filing a recovery suit was under process.

### 2.9 Poor planning and co-ordination of works

It is incumbent upon the executing authorities to plan, sequence and coordinate their works in a manner so as to ensure that the infrastructure created is utilized and the intended benefits from the expenditure incurred accrue within a reasonable time frame. Audit appraisal of the records relating to construction of facilities for supply of water revealed that infrastructure was being created without linkage with the actual requirements or availability of water which resulted in expenditure of Rs. 33.78 crore being rendered idle.

# 2.9.1 Construction of command tanks without ensuring availability of the required water

The Project Report prepared in July 1992 for the development of Dwarka Phase I envisaged a water requirement of 80 MGD (Million Gallons per Day) to cater to an anticipated population of about 12 lakh in the sub-city. Based on a norm of storage capacity equal to 40 *per cent* of daily requirement, the project report anticipated a requirement of six command tanks. Based on these projections, DDA planned the construction of four command tanks in phase I and two in phase II for the supply of water to the general public. The position of the construction and utilization of the four command tanks in phase I was as under:

Command tank number	Year & month of start of work	Year & month of completion	Cost (Rupees in crore)	Capacity of the tank (MGD)	Present availability of water (MGD)
1.	October 1999	October 2001	17.13	13	Nil
2.	October 1996	February 1999	6.22	10	3
3.	September 2001	March 2004	7.61	7	Nil
4.	November 1997	May 1999	4.40	6	Nil

As evident from above, the storage capacity created by DDA was of 36 MGD whereas the present availability of water from the Delhi Jal Board (DJB) was only three MGD with effect from July 2004.

Audit noted that the construction of the command tanks was not linked with the actual requirement as well as availability of water. Based on the present population in Dwarka, the requirement of water was actually only 10 MGD as of February 2005. DJB had expressed their inability to supply any more than three MGD of water to Dwarka in the immediate future till the availability of raw water improves. This quantum of three MGD of water supplied by DJB or in fact even the full present requirement of 10 MGD was within the capacity of command tank No.2 alone. Hence, the remaining tanks would remain idle till the requirement increased and availability of water from DJB. Moreover, as the command tanks are underground structures, prolonged non-use would result in their progressive deterioration and blockage requiring additional funds to render them usable at a subsequent stage.

DDA stated (December 2005) that the command tanks had been constructed according to the scheme approved by the DJB and each tank was required to feed a particular area/sector of Dwarka. Early construction is beneficial to DDA. Further, maintenance expenditure would inevitably have to be incurred on the tanks to make them usable at a later stage.

However, the fact remained that there was no immediate prospect of utilization of the three command tanks constructed at a cost of Rs. 29.14 crore.

# 2.9.2 Construction of underground water reservoir without ensuring availability of water

Similarly, construction of two underground water reservoirs of 3.75 MGD capacity each was commenced in February 1997 and completed in November 2000 in Rohini Phase-III at a total cost of Rs. 4.64 crore. According to the project report on development of Rohini sub-city, the water requirement of phase III was 10 MGD by 2005-06. However, the actual present requirement was eight MGD of which only 0.30 MGD was being supplied by DJB. Due to the lack of water, these underground tanks remained unutilized even after expiry of five years since their completion. Here again, it was apparent that the construction of the underground water reservoirs was not linked to either the actual requirements or the prospect of availability of water resulting in the expenditure being rendered idle.

DDA reiterated (December 2005) that the water reservoirs had been constructed in accordance with the scheme approved by DJB who were subsequently unable to supply the water due to general water shortage in Delhi.

#### Recommendation

Institutional mechanisms should be strengthened to ensure adequate co-ordination at the planning stage itself with other civic planning and public utility agencies so that creation of public infrastructure and facilities by DDA are in consonance with the plans and projections of the connected civic agencies. The objective should be to ensure that scarce resources are utilized only on infrastructure which is actually required and immediately usable on completion of the work and expenditure incurred does not remain idle.

### 2.10 Inadequate quality control

### 2.10.1 Lack of quality test of infrastructure created

Unless infrastructure created is tested in accordance with the norms, the quality of the works is not assured.

The agreement for construction of command tank No.3 in Dwarka Phase I stipulated (August 2001) that the contractor should fill up the tank to a level of 212.55 metre immediately after the construction and curing is complete in order to test its retaining capacity and detect leakages etc. Subsequently, work of applying a minimum of two coats of water base protective epoxy coating with sikgard on retaining wall, water tanks floor or masonry structure at a cost of Rs. 86.41 lakh was sanctioned as an extra item in February 2002. However, neither was the test conducted on the plea of lack of water nor was the epoxy

coating applied. Consequently, the quality of the work done at a cost of Rs. 7.61 crore could not be assured.

DDA accepted (December 2005) that the work relating to water base protective epoxy coating had not been executed as of November 2005.

### 2.11 Internal Audit

DDA has an internal audit cell headed by the Member (Finance) who is assisted by the Chief Accounts Office along with other staff. DDA has a total of 197 auditable units of which 61 were at its headquarters and 136 in its field formations. The Internal Inspection Manual of the Authority did not specify the frequency or periodicity of the audit to be conducted by the internal audit wing. It however, provided that the Member (Finance) was authorized to approve the quantum and extent of audit applicable to various records. The Manual also envisages that the internal audit parties should conduct audit of various schemes/projects being executed by the various divisions.

An appraisal of the functioning of the internal audit wing with special reference to the checks exercised in respect of the developmental schemes indicated that while the coverage of units had steadily improved over the last three years, the coverage was still just about 27 *per cent* of the total number of auditable units as tabulated below:

Sl. No.	Financial Year	Total no. of auditable units	No. of units audited	Percentage of units audited
1.	2002-03	197	15	7.61
2.	2003-04	197	37	18.78
3.	2004-05	197	53	26.90

Moreover, no review had so far been conducted of any of the developmental schemes being executed by the Authority during the last five years.

DDA stated (December 2005) that efforts are being made to strengthen their internal audit. An Internal Inspection manual is being finalized where the periodicity, procedures and necessary checks to be exercised by internal audit would be specified.

#### Recommendation

Internal audit should be strengthened so as to ensure coverage of all major schemes being executed by the Authority. Preparation of the manual should be expeditiously completed so as to prescribe the periodicity, procedures and checks to be exercised in internal audit.