

CHAPTER III: INTEGRATED AUDIT

3.1 Fisheries Department

The Fisheries Department is responsible for development of inland fisheries to increase productivity of fish by imparting technical support to the fish farmers and developing infrastructure for fish farming. The Department formulated a production oriented Revised Perspective Plan (RPP 2004-2012) with the objective of increasing the productivity to 3,050 kg per hectare per year and attaining self sufficiency in production of fish by bridging the gap between demand and supply by 2011-12. An integrated audit of the functioning of the Department at the end of the 5th year of implementation of the RPP was an attempt to highlight the areas and issues, which need to be addressed for successful achievement of the objectives of the Department.

The method used by the Department to quantify production was unreliable and was prone to errors.

(Paragraph 3.1.7.2)

Production target projected in the Perspective Plan was based on lower average productivity of 1,865 kg per hectare per annum compared to over 3,500 kg per hectare per annum productivity in private sector.

(Paragraph 3.1.9.1)

Discrepancies noticed between the production records of fish farmers/Self Help Groups/Matshya Samabay Samities and departmental survey records and the method adopted for assessment casts doubt about the departmental claim relating to the achievement of production targets.

(Paragraph 3.1.9.3)

Results of soil, water and fish feed reported by the samples tested in the testing laboratories showed unfavourable water and soil conditions and supply of substandard fish feed.

(Paragraphs 3.1.11.2 and 3.1.11.3)

Due to poor management and lack of supervision, 34 per cent of Fishermen Cooperative Societies were dormant and 35 per cent were running in loss.

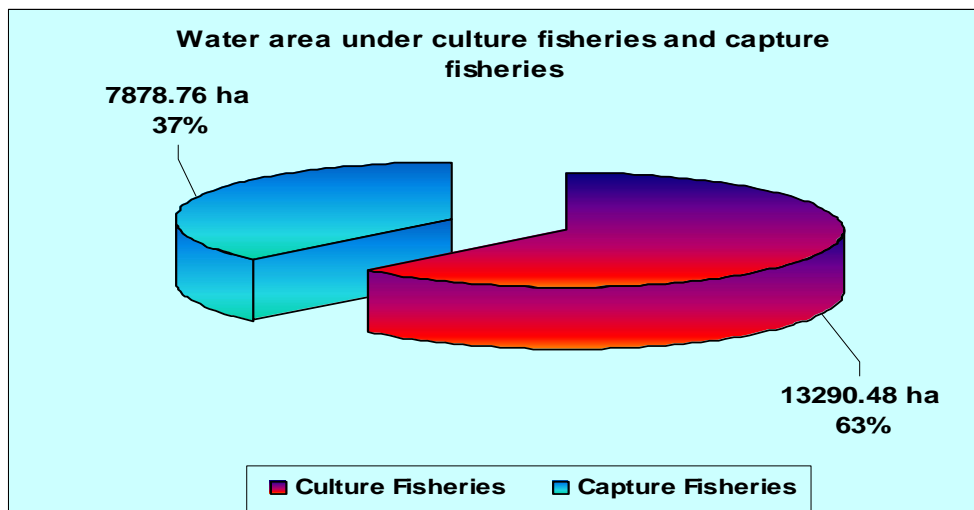
(Paragraph 3.1.14)

3.1.1 Introduction

Fisheries Department deals with development of inland fisheries in three different sectors *viz.* Government Sector, Cooperative Sector and Private Sector. Fish, a staple food (including dry fish) is very popular in the State and is being consumed by about 95 *per cent* of the population on a regular basis. At the beginning of 2004, the State had an aqua-resource of 21,169.24 hectares (ha) (Culture fisheries¹: 13,290.48 ha and Capture fisheries²: 7,878.76 ha). The Government Sector constituted 98.7 *per cent* of capture and 5.9 *per cent* of culture fisheries while the remaining 1.3 *per cent* capture fisheries and 94.1 *per cent* culture fisheries were in Private (12,324.57 ha) and Cooperative (181.91 ha) sectors. The total production of fish during 2003-04 was 17,980 MT.

The total water area under culture fisheries and capture fisheries is depicted in **Chart No. 3.1.1**. Distribution of water area under culture fisheries between Government, Private and Cooperative Sectors is given in **Chart No. 3.1.2** and distribution of water area under capture fisheries between the Government and Private Sectors is shown in **Chart No. 3.1.3** below:

Chart No. 3.1.1



¹ Culture fisheries are fisheries where human intervention contribute in rearing and growing fish.

² Fisheries where fishes breed naturally are available for capture by humans are called Capture fisheries.

Chart No. 3.1.2

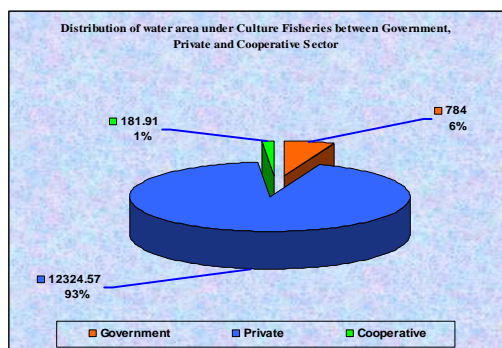
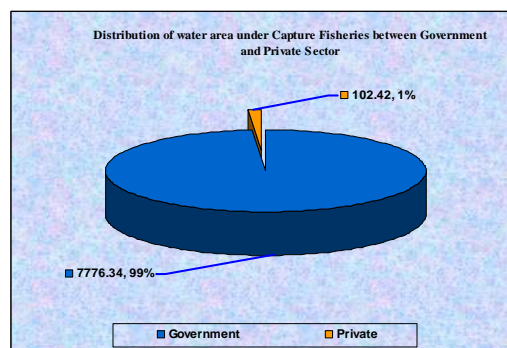


Chart No. 3.1.3



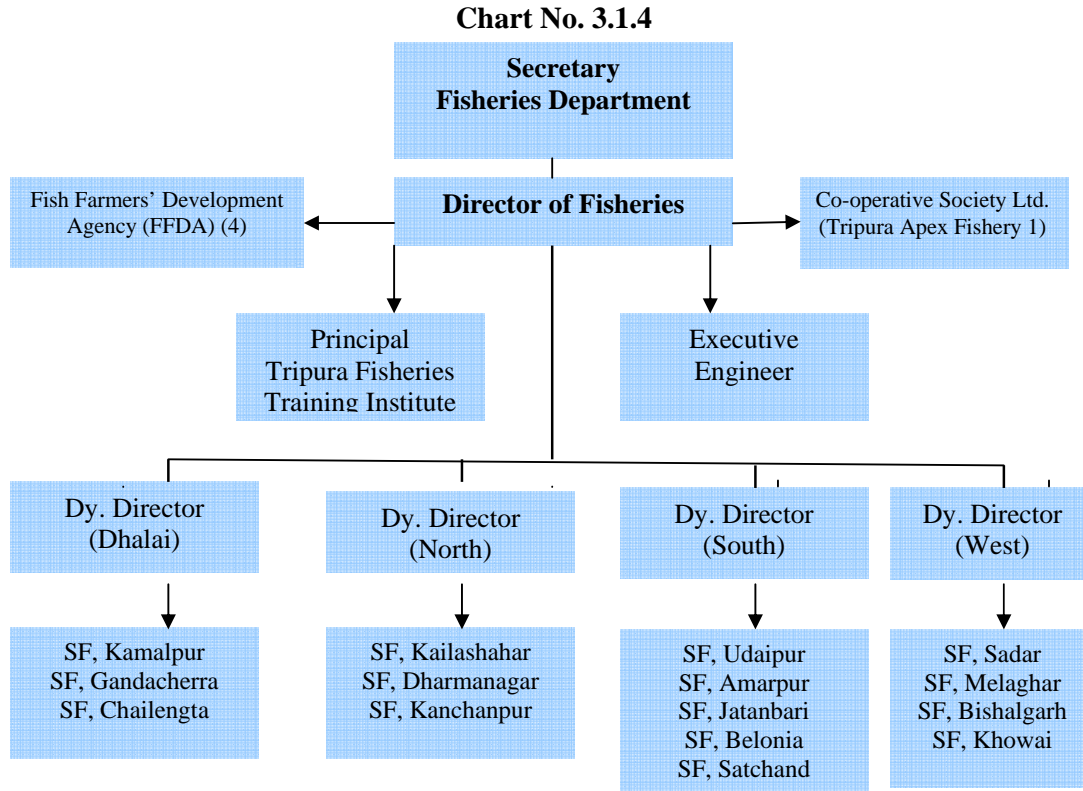
The gap between the requirement³ (40,656 MT) and actual production was 22,676 MT as per the Perspective Plan of the Department. In view of the importance of fisheries in public life both in respect of nutritional requirement and potential employment generation, the Department framed a Revised Perspective Plan (2004-05 to 2011-12) for development of fisheries with the objective of making the State self-sufficient in fish production by 2012. Towards this objective, the Department initiated various production oriented fishery development schemes (State Plan Schemes/Centrally Sponsored Schemes/North East Council Schemes) during the review period.

3.1.2 Organisational Set-up

Fisheries Department comprises 15⁴ sub-divisions spread over all four districts in the State. These sub-divisions, headed by Superintendent of Fisheries (SF), are supervised by four Deputy Directors of Fisheries (DDF) at the District level under the control of the Director, Fisheries Department. The Department is headed by a Secretary who is the administrative head. The organogram of the Department is given below:

³ Calculated @13 kg per capita consumption per annum.

⁴ West Tripura District: SF-4 (Sadar, Melaghar, Bishalgarh, Khowai); North Tripura District: SF-3(Kamalpur, Dharmanagar, Kanchanpur); South Tripura District: SF-5 (Udaipur, Amarpur, Jatanbari, Belonia, and Satchand); Dhalai District: SF-3(Ambassa, Gandacharra and Chailengta).



3.1.3 Scope of Audit

The integrated audit was carried out during May-July 2009 and covered the activities of the Department during the period 2004-09. Out of 21 units, records of nine⁵ units (Directorate and eight field offices in West Tripura and South Tripura district) selected by stratified monetary unit sampling method, were scrutinised. Out of 20 Schemes (eight State Plan Schemes, nine Centrally Sponsored Schemes (CSS) and three North Eastern Council (NEC) Schemes), five Schemes⁶ (two State Plan Schemes, two CSS and one NEC) were selected for detailed review.

3.1.4 Audit Objectives

The audit objectives were to assess the performance of the Department in the following areas:

- Planning
- Budgetary and Financial Management

⁵ (i) Directorate (ii) Dy. Director, West (including FFDA) (iii) Dy. Director, South (including FFDA) (iv) SF, Sadar, (v) SF, Bishalgarh (vi) SF, Khowai (vii) SF, Udaipur (viii) SF, Belonia (ix) Principal, TFTI.

⁶ State Plan Schemes: (i) Scheme for Comprehensive Programme to increase Level of Fish Productivity, (ii) Scheme for Extension, Information, Education & Training; Centrally Sponsored Scheme: (i) Scheme for Development of Inland Fisheries & Aqua-culture (FFDA) and (ii) Scheme for National Welfare of Fishermen Families; North Eastern Council (NEC) Scheme: (i) Popularisation & Propagation of Prawn Culture.

- Programme Implementation
- Material Management
- Human Resource Management
- Monitoring and Internal Audit.

3.1.5 Audit Criteria

Audit findings were benchmarked against the following criteria:

- Perspective Plan, Annual Plans and Work Plans
- General Financial Rules
- Central Treasury Rules
- Delegation of Financial Power Rules, Tripura, 2007
- Departmental policies/rules and regulations
- Scheme Guidelines
- Procedures prescribed for monitoring and evaluation.

3.1.6 Audit Methodology

An entry conference was held on 4 May 2009, with the Secretary, Fisheries Department, wherein the audit objectives, scope and criteria were explained. Records of the selected units were scrutinised with reference to audit objectives and criteria. Replies furnished by the Department to audit memos/requisitions, departmental publications, records of the Department and data collected through questionnaires were used as evidence.

Exit conference was held on 20 August 2009, with the Secretary, Fisheries Department. The results of discussion have been incorporated in the report at appropriate places.

3.1.7 Planning

3.1.7.1 Perspective Plan

The Department prepared a Perspective Plan (2001-02) covering the period 2002-12. The plan was subsequently revised in 2003-04 to cover the period 2004-12. The revision was necessitated due to the realisation by the Department that it had erred in computing the data on available resources and production based on which the Perspective Plan was formulated.

As of April 2004, the per capita production of fish was 5.5 kg against the nutritional requirement of 11.1 kg per annum (as prescribed by the National Commission of Agriculture 1976 and accepted by the World Health Organisation). Taking into consideration the 95 per cent fish eating population in the State, the Department formulated the Revised Perspective Plan (RPP) with the main objective of bridging

the gap between the demand and supply (22,676 MT during 2003-04) and to achieve self-sufficiency in fish production for its expected population of 37.29 lakh⁷ by 2011-12 (46,843 MT with productivity of 3,050 kg per hectare per year and an average consumption of 13 kg per capita per year). Employment generation through development of fisheries and its allied activities was the other objective envisaged in the Perspective Plan. To achieve these objectives, the following programmes were formulated in the RPP (2004-12) for implementation:

- Increase in fish productivity
- Fisheries extension
- Strengthening of fisheries Department
- Development of fisheries of Open Water bodies
- Reclamation of water bodies
- Development of post harvesting facilities
- Development of Fisheries Co-operatives.

The requirement projected in the Perspective Plan to attain self-sufficiency in fish production by 2012 was based on a fixed per capita annual consumption of 13 kg. The achievements under the above programmes *vis-à-vis* the objective set in the Perspective Plan are discussed in the report under programme implementation.

The year-wise requirement of funds as estimated in the Perspective Plan from all sources during the period covered in audit were as under:

Table No. 3.1.1

(Rupees in crore)

Year	Department's own Budget	Centrally Sponsored Schemes	Other Departments including ACA ⁸ & NEC	Non-Government Source	Total
2004-05	1.54	1.61	5.76	3.17	12.08
2005-06	2.00	1.35	5.95	3.40	12.70
2006-07	2.31	1.13	5.88	3.54	12.86
2007-08	2.07	0.54	6.00	3.74	12.35
2008-09	2.28	0.50	6.19	3.96	12.93

Source: Perspective Plan

3.1.7.2 Preparation of Annual Action Plan (AAP)

(i) Achievements of the preceding year were not recorded in the AAPs. Therefore, the unachieved targets of previous year, stated to have been assessed and included in the subsequent AAPs were not clearly projected.

(ii) The development of post harvesting facilities as flagged in the Perspective Plan was not addressed during the last five years. Though an initiative was noticed in

⁷ Calculated at a growth rate of 1.57 per cent per annum on the State's population of 31.91 lakh estimated in the Census-2001.

⁸ ACA: Additional Central Assistance.

the Annual Plan for 2005-06, the items were substantially different than that of the Perspective Plan as discussed in details at paragraph 3.1.13.

(iii) No scientific/rational method was used to quantify production of fish in the State. Survey was conducted by the Fisheries Department by collection of door to door data on fish production. Fishery Assistants visited the fish farmers and recorded the harvested quantity through verbal discussion. The anticipated stock in the tanks/ponds etc. was then added to the harvested quantity to arrive at the production for the year. The Government confirmed that in the absence of any scientific method in the country, the Department had to depend only on such methods.

The method adopted by the Department was not rational and therefore the claim of production was not reliable as discussed in a succeeding paragraph.

(iv) The reliability and correctness of the data was not assured as no mechanism exists to cross check and validate the data collected by the Fishery Assistants. The Government stated (September 2009) that the data so collected was cross-checked at every level (Panchayat, Block, Sub-Divisional and at District level). The claim of the Government, however, could not be substantiated as these were not documented in any of the nine units test-checked in audit.

3.1.8 Financial Management

3.1.8.1 Budgeting

The Department prepares the budget (both Plan and Non-Plan) on the basis of the expenditure ceiling fixed in advance by the Finance Department. Plan budget is prepared in consultation with the Planning and Coordination Department. The provision made in the budget during the last five years ranged from about Rs.11 crore to Rs.21 crore under Revenue Account and Rs.0.01 crore to Rs.1.83 crore under Capital Account as detailed in the table below:

Table No. 3.1.2

(Rupees in crore)

Year	Budget Provision			Expenditure	Expenditure on Salary (Percentage of Salary to Revenue Expenditure)
	Original	Supple- mentary	Total		
Revenue					
2004-05	10.33	0.90	11.23	11.09	8.32(75)
2005-06	12.22	0.56	12.78	11.76	8.54(73)
2006-07	15.75	---	15.75	14.19	9.11(64)
2007-08	17.06	1.11	18.17	16.88	8.71(52)
2008-09	20.00	1.13	21.13	18.73	11.39(61)
Total	75.36	3.70	79.06	72.65	
Capital					
2004-05	0.78	0.37	1.15	0.07	--
2005-06	1.83	---	1.83	1.19	--
2006-07	0.57	0.14	0.71	0.68	--
2007-08	0.02	--	0.02	--	--
2008-09	0.01	--	0.01	--	--
Total	3.21	0.51	3.72	1.94	--

Source: Appropriation Accounts, Grant No.26, Budget documents and VLC.

Scrutiny revealed several deficiencies in financial management indicating poor budgeting and weak expenditure control as discussed below:

- (i) As can be seen from the above table, there were persistent savings in Capital Account during all the years. This was primarily due to booking the expenditure of capital nature in Revenue Account. During the years 2006-09, Rs.1.25 crore, Rs.1.20 crore and Rs.1.19 crore were utilised from Revenue Account for construction of office buildings, laboratory buildings, training centres, market sheds, godowns etc.
- (ii) Original budget provisions were augmented with supplementary provisions unnecessarily even when expenditure did not exceed the original provision on Capital Account (2004-05) and on Revenue Account (2005-06 and 2007-09).
- (iii) The expenditure on Salary constituted 52 to 75 *per cent* of the revenue expenditure during 2004-09.
- (iv) The Expenditure Control Register, maintained in the Directorate, recorded monthly expenditure sub-head-wise without mentioning the allocation of funds and was not suitable to monitor the excess/savings under a sub-head and to exercise control over expenditure. The reasons for such savings and excess expenditure were not on record.

3.1.8.2 Drawal of funds

According to the Delegation of Financial Power Rules, Tripura, 2007, the Heads of the Offices were empowered to accord administrative approval and expenditure sanction in respect of approved Plan and Non-Plan schemes/works for Rs.1.00 lakh and Rs.0.50 lakh respectively and SFs were authorised to draw Rs.0.30 lakh in a single abstract contingent (AC) bill. Scrutiny of records of Superintendent of Fisheries, Sadar and Udaipur revealed violation of the above provision as detailed below:

- (i) The Superintendent of Fisheries, Sadar received a fund of Rs.20 lakh (March 2009) for development of basic infrastructure to promote fishery sector under Rashtriya Krishi Vikas Yojana (RKVY), a State Plan Scheme. The fund was drawn by the SF in four AC bills of Rs.5 lakh each in excess of his financial power. The Government stated (September 2009) that four AC bills were drawn with the permission of the Finance Department. Audit scrutiny revealed that the permission of the Finance Department was for drawal of AC bill and did not authorise the drawing authority to exceed the financial limit prescribed for the purpose. The detailed countersigned contingent (DCC) bills were not submitted as of July 2009.
- (ii) Superintendent of Fisheries, Udaipur had drawn Rs.5.84 lakh for procurement of fish feeds from the Tripura Apex Fisheries Cooperative Societies (TAFCS), Agartala by splitting up the amount against 14 expenditure sanction orders of varying amounts within his financial limit, to avoid obtaining the sanction of competent

authority. Government admitted the fact and assured to follow the financial provisions in future.

3.1.8.3 Reconciliation with Treasury and Bank

Financial rules require a Drawing and Disbursing Officer/Head of Office to make arrangement for regular monthly reconciliation of remittances to and withdrawals from Government exchequer. None of the nine selected units carried out regular monthly reconciliation with Treasury and Bank.

3.1.8.4 Advances to Implementing Officers (IOs)

Adjustment against advances given to Implementing Officers (IOs) for implementation of different schemes should be submitted immediately after completion of work specified in the work order. Test-check revealed that two SFs⁹ advanced Rs.50.62 lakh to nine IOs during November 2007 to May 2009 for carrying out planned activities under “Welfare of Fishermen” and “Reclamation of water bodies/ponds”. The advances remained unadjusted as of August 2009, due to slow progress of works though the works were scheduled to be completed within 30 to 60 days. No action was taken by the SFs against the defaulting IOs. The Government stated (September 2009) that adjustment bills would be submitted as soon as the work is complete.

3.1.8.5 Abstract Contingent Bills

Rule 27(11) of the Delegation and Financial Power Rules, Tripura, 2007 provides that AC bill should be adjusted within 60 days by submitting the detailed countersigned contingent (DCC) bills to the Controlling Officer for his countersignature and onwards transmission to the Accountant General.

Scrutiny revealed that in respect of 15 DDOs (Directorate and 14 SFs), DCC bills against the drawal of 596 AC bills for Rs.2.17 crore drawn during 2007-09 were lying outstanding as of June 2009. Out of these, 75 AC bills involving Rs.0.15 crore were more than one year's old.

Non-submission of adjustment bills in time and failure in enforcing strict financial discipline by the Department could lead to fraud and misappropriation. The Government in reply (September 2009) stated that the outstanding AC bills are being processed for submission to the Accountant General.

Programme Implementation

3.1.9 Increase in Fish Productivity

3.1.9.1 Fish Production

The RPP envisaged self-sufficiency in production of fish by 2012 through increased production from 20,500 MT in 2004-05 to 46,840 MT by 2012. However, the year-

⁹ SF, Udaipur: Advanced Rs.17.24 lakh to 6 IOs during 11/2007 to 03/2009 and SF, Khowai: Advanced Rs.33.38 lakh to 3 IOs during 07/2008 to 05/2009.

wise production of fish during 2004-09 was far below the requirement as given in Table 3.1.3.

Table No.3.1.3

Year	Requirement as per RPP (in MT)	Actual production (in MT)	Shortfall in MT (percentage in bracket)	Productivity as per RPP kg/ha/year	Actual productivity kg/ha/year
2004-05	41,170	19,838	21,332 (52)	1,479	1,414
2005-06	41,940	23,871	18,069 (43)	1,649	1,650
2006-07	42,600	28,634	13,966 (33)	1,846	1,859
2007-08	43,280	32,830	10,450 (24)	2,059	1,931
2008-09	43,950	36,991	7,430 (17)	2,292	2,074

Source: Departmental records.

The above table shows that although the production increased, the percentage of shortfall with reference to the requirement of fish ranged from 17 to 52 during 2004-09. The anticipated quantum of productivity was also not achieved in 2004-05, 2007-08 and 2008-09. The shortfall was attributed by the Department to acidic nature of soil, non-adoption of scientific method due to high input cost and lack of awareness among the fish farmers.

Scrutiny of two Self Help Groups (SHGs) (Subhashnagar SHG, Jirania, West Tripura District and Sukanta Fishery SHG, Holakhet GP, South Tripura District) revealed that the average rate of productivity achieved by them was more than 3,500 kg per hectare per annum, much higher than the average of 1,865 kg per hectare per annum during 2004-09 taken to tabulate the target projected in RPP.

While there is no recorded reason for the low average productivity, discussion of the audit team with quite a few fish farmers revealed that inadequate technical support, short supply of high yielding fingerlings, unfavourable water and soil conditions, farmer's inability to use standard fish feeds and pilferage in Government farms are some major factors which hold back the productivity in the State. Audit observed that the average productivity of 1,865 kg per hectare was on the lower side as efficient implementation of various components of the Perspective Plan (as discussed in the succeeding paragraphs) and proper accountability at each level could have yielded higher average production.

In reply the Government stated (September 2009) that different categories of farmers in the State were kept in mind while fixing the target and the instances quoted in audit were progressive farmers only.

3.1.9.2 Dependence on outside supply

In addition to the production within the State, the quantity of fish brought in from outside the State and imported from outside the country plays a significant role in meeting the demand of the local market. The quantum of such inflow was as under:

Table No.3.1.4

(Quantity in MT)

Year	Inflow from other States	Imports from outside the country		Total inflow from outside the State	Requirement as per RPP
		Hilsha Fish	Other varieties		
2004-05	3,239.05	374.11	420.25	4,033.41	41,170
2005-06	5,292.93	816.68	770.95	6,880.56	41,940
2006-07	5,472.30	616.53	1090.21	7,179.04	42,600
2007-08	4,277.16	318.77	4064.08	8,660.01	43,280
2008-09	6,434.60	687.08	4,374.89	11,496.57	43,950

Source: Departmental records and information collected from Custom Department.

The above information may not necessarily give a comprehensive picture relating to availability of fish, as unofficial inflow of fish both from other States and across the porous border is not factored in.

Further, gradual increase in inflow over the years both from outside the State and also from outside the country was indicative of gradual increase in the State's dependence on outside supply rather than approaching towards self-sufficiency. Data collected from the Custom Department and the Tripura Chamber of Commerce confirmed the quantity of import and supply from outside the State as mentioned in the table above. The data on fish inflow affirm that the total quantity of inflow from outside the State increased from 10 per cent in 2004-05 to 26 per cent in 2008-09 of the total requirement.

3.1.9.3 Doubtful claim of production

Data of fish production in the survey report was computed by taking into account the quantity of fish harvested and the anticipated stock of fish in the ponds on verbal discussion with fish farmers. As anticipated stock of fish in the ponds was taken into account to work out the total production of fish, the production claimed by the Department was only an anticipated quantity. Instances of discrepancies between the production records of the fish farmers/SHG/Matshya Samabay Samities (MSSs) and departmental survey records noticed are detailed below:

Table No. 3.1.5

Name of the SHG/MSS/Fish farmers	Name of SF	Departmental Survey record		Actual position as per the records of the SHG/MSS etc.	
		Water area (in ha)	Production (in kg)	Water area (in ha)	Production (in kg)
Kamaleswari SHG	Bishalgarh	0.96	3,092	0.80	2,552
Ganga Fishery SHG	Do	1.60	2,885	1.60	1,540
Japa SHG	Do	1.21	3,650	1.20	2,500
Amarendra Debbarma	Do	0.16	380	0.16	330
Belonia MSS Ltd.	Belonia	3.13	8,175	3.13	1,095
Radhanagar SHG	Do	5.80	5,680	1.0	252
Chebri MSS Ltd.	Khowai	10.34	14,238	10.34	9,371

Source: Departmental records and records of the fish farmers.

These differences were due to inclusion of anticipated stock available in the ponds after harvesting during that year. This would also result in cumulative overstatement of production since the same stock of the previous year in the ponds was once again considered to calculate the production of the current year. The method adopted by the

Department was not rational and therefore the claim of production was not reliable and casts doubt on the overall production claimed by the Department.

3.1.9.4 Production of fish seed in Government Farms

According to the norms of the ICAR¹⁰, the water area in production of fingerlings needs to be divided between nursery and rearing ponds in 20:80 ratio. The norms also specify that from a stocking of 20 lakh fries¹¹ per ha in rearing ponds, 50 per cent i.e. 10 lakh should grow into fingerlings. Scrutiny revealed that the Department did not maintain the prescribed norms which resulted in shortfall in production of fingerlings as detailed below:

Table No. 3.1.6

Year	Total area under fish seed production (in ha)	Area should be distributed in 20:80 ratio (in ha)		Actual distribution of water area in ha (ratio in bracket)		Fingerlings that could have been produced in area at column 4 (in lakh) Column 4 x 10 lakh	Actual production (in lakh)	Shortfall in production (in lakh)
		Nursery	Rearing	Nursery	Rearing			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2004-05	18.59	3.72	14.87	8.95(48)	9.64(52)	148.70	108.61	40.09
2005-06	21.20	4.24	16.96	11.18(53)	10.02(47)	169.60	103.88	65.72
2006-07	26.93	5.39	21.54	11.30(42)	15.63(58)	215.40	142.71	72.69
2007-08	26.93	5.39	21.54	11.30(42)	15.63(58)	215.40	122.45	92.95
2008-09	26.71	5.34	21.37	11.04(41)	15.67(59)	213.70	118.36	95.34
TOTAL						962.80	596.01	366.79

Source: Departmental records

Above table shows that the shortfall in production of fingerlings of 366.79 lakh during the last five years resulted in the loss of fingerlings worth Rs.94.08 lakh¹² with consequent effect on the production of fish.

In reply the Government stated (September 2009) that due to better survival in the open water bodies, the size of the fingerlings produced in the Government farms were bigger than the standard norms which causes shortfall in production. The Government however, did not respond to the audit observation on the ratio of distribution of water area beyond ICAR norms.

3.1.9.5 Production of fish in Government farms

Table below shows that the productivity in Government farms varied between 495 and 906 kg per hectare, which was far below the State average of 1,414 to 2,074 kg per hectare during 2004-09:

¹⁰ Indian Council of Agricultural Research.

¹¹ Spawn aged between 15-30 days are termed as fry and fry aged between 30-60 days are fingerling.

¹² Calculated @ Rs.250 per thousand of fingerlings during 2004-08 and @ Rs.275 per thousand during 2008-09.

Table No. 3.1.7

Year	Area of culture fisheries in Government farms (in ha)	State average rate of productivity (in kg/ha)	Production that should have been achieved (in MT)	Production actually achieved (in MT)	Rate of productivity actually achieved (in kg)	Shortfall in production (in MT)
2004-05	79.04	1414	111.76	54.26	686	57.50
2005-06	64.58	1650	106.56	58.49	906	48.07
2006-07	67.31	1859	125.13	33.29	495	91.84
2007-08	67.31	1931	129.98	45.90	682	84.08
2008-09	67.31	2074	139.60	52.74	784	86.86
TOTAL			613.03	244.68		368.35

Source: Departmental records.

Thus, the shortfall in production compared to the State average was 368.35 MT, worth Rs.2.02 crore¹³ during 2004-05 to 2008-09.

The shortfall in production was attributed by the Government to poaching and floods. Besides, the water area under Government fish production was stated to be utilised for brood stock maintenance, seed production, training and demonstration etc.

The reply is not justified as factors like poaching and floods are prevalent in private farms as well. The fact of multifarious utilisation of water area is also not acceptable as the area for seed production was excluded in computing the shortfall in production.

However, during exit conference, the Government assured corrective measures against low yield in Government farms.

3.1.10 Fisheries Extension

Development of human resources through training, exposure visit, awareness and motivation for both departmental staff and pisciculturists was envisaged in the Perspective Plan. The achievement of the Department in this regard is discussed hereunder:

3.1.10.1 Fish Farmer Development Agency

The State has set up four Fish Farmer Development Agencies, which *inter alia* aimed at meeting the training requirements planned under the fisheries extension programme. Against the target of imparting training to 22,510 fish farmers, 17,570 (78 per cent) were trained during 2004-09, under short course training of 1 to 10 days duration by the Agencies. The Government attributed the shortfall to delay in release of funds by the GOI.

3.1.10.2 Creation of Laboratory and Hostel for Fish Processing training

Government of India sanctioned Rs.19.75 lakh in 2003 for construction of a hostel with training infrastructure in fish processing at the Tripura Fishery Training Institute (TFTI), Udaipur. The project *inter alia* included creation of hostel accommodation for

¹³ Calculated at the Government rate of Rs. 50 per kg during 2004-06, Rs. 55 per kg during 2006-08 and Rs. 60 per kg during 2008-09.

25 fish farmers, procurement of equipment, raw materials and cost of training. The project was scheduled to be completed within three years.

Scrutiny of records relating to implementation of the project revealed the following:

- (i) The hostel, constructed at a cost of Rs.10.17 lakh, made provision for eight fishermen instead of 25.
- (ii) No plants and equipment for sausage making and cryo preservation units were purchased. Instead, materials¹⁴ not related to the project were purchased without the approval of the Government.
- (iii) While the project proposal provides for training of 75 fishermen every year, 135 fishermen were trained during 2005-07. The Government attributed lack of interest among beneficiaries for the training as the main reason for not conducting training after 2006-07. However, there was nothing on record to suggest that availability of such training was given wide publicity among the intended beneficiaries.

In reply, the Government stated (September 2009) that in view of the feedback received from the trained departmental officers that the products are not acceptable to Indian consumers, the sausage making unit and cryo-preservation units were not set up. Instead, it was stated that demonstration and training on preparation of items like fish pickle, prawn pickle, fish cutlet, fish finger etc. had been taken up for training to make it more purposeful and beneficial and that the required materials for the training had also been procured and installed.

3.1.10.3 Tripura Fisheries Training Institute, Udaipur

The Department decided (April 2002) to conduct four months' refresher courses (May-August) for 25 trainees (20 in-service staff members and five educated unemployed youth) each year. Records revealed that only 51 in-service candidates (Fishery Assistants) were imparted training during 2002-05 and thereafter no such training was conducted during 2006-09 due to shortage of staff. The training on refresher course, therefore, could not be imparted to 301 Fishery Assistants out of 352 in the Department and training could not be imparted to any educated unemployed youth either during 2002-09.

Against one post of Principal and three posts each of Training Superintendents and Demonstrator sanctioned in 1987, no regular Principal was posted in the institute. Two posts of Training Superintendent and three posts of Demonstrator were lying vacant since creation of those posts. Training is being imparted by SFs outsourced from other units.

Government stated (September 2009) that due to shortage in the cadre of FA till 2008, the refresher's course could not be continued. It however, did not respond to the observation on training to educated unemployed youth.

¹⁴ Steel Almirah, Exide battery, digital video camera, TV, DVD player, digital balance.

3.1.10.4 Entrepreneurship development and employment generation

Entrepreneurship development among educated unemployed youth through formation of 166 new Self Help Groups (SHGs) and activating 334 existing SHGs by providing them the technical know-how on advanced fish culture technologies and supplying them basic inputs for fish culture was envisaged in the Perspective Plan. Besides, providing necessary funds and technical support to selected SHGs for establishing fish feed manufacturing plants in different parts of the State was also planned. The target and achievement of creation of SHGs and employment generated during the last five years were as under:

Table No. 3.1.8

Year	Targets		Achievements	
	Entrepreneurship generated (Number)	Labour mandays generated (in lakh)	Entrepreneurship generated (Number)	Labour mandays generated (in lakh)
2004-05	20,020	3.45	17,230	3.49
2005-06	28,059	3.50	29,492	3.55
2006-07	37,633	3.56	41,227	3.91
2007-08	48,205	3.62	50,004	4.20
2008-09	59,988	3.68	60,524	4.46

Source: Departmental records

As against a target of 166 new SHGs, 782 SHGs were formed in addition to activating 334 dormant SHGs during the last five years. 123 SHGs formed during the past five years turned inactive on expiry of lease period of their respective water area and lack of coordination among the members of such groups. Achievement in the formation of SHGs was in excess of what was targeted by the Department and employment in terms of labour mandays generated also showed positive achievement in the State during 2004-09.

3.1.11 Strengthening of Fisheries Department

Strengthening of Fisheries Department includes creation of basic infrastructure like construction of administrative buildings, human resource development, creation of water and soil testing laboratory, breeding of genetically improved varieties and production of ornamental fish seed. Progress of the proposed planned activities as observed in audit is illustrated below.

3.1.11.1 Construction of basic infrastructure

During 2004-09, for strengthening the Fisheries Department, it was proposed in the AAPs to take up 58 construction works which included construction of office buildings, training centres, inspection bungalow, godowns, fish feed analysis lab, awareness centres, overhead tanks, boundary walls and water and soil testing laboratories at different locations in all the four districts. Scrutiny of records revealed that out of 58 works, 37 works¹⁵ scheduled to be completed within one to four months of award of work orders, involving an estimated cost of Rs.1.62 crore were not

¹⁵ 2006-07: 4 works at Rs.11.64 lakh, 2007-08: 15 works at Rs.59.95 lakh and 2008-09: 18 works at Rs.90.79 lakh.

completed as of March 2009. The delay in completion ranged between one month and 30 months as of June 2009. The reasons for delay were not on record.

3.1.11.2 Water and Soil Testing Laboratory

The Perspective Plan envisaged creation of laboratories in each block in addition to one each in districts and sub-divisions. The Plan envisaged creation of laboratories at district level initially, followed by sub-divisions and blocks. Forty laboratories were proposed to be constructed in the Perspective Plan, of which, 22 laboratories were proposed to be constructed during 2004-09. As of June 2009, only 19 laboratories were taken up, of which eight¹⁶ were completed and functional. Scrutiny revealed that water and soil testing was done only in 5 to 6 per cent¹⁷ of total water area, leaving most of the water area out of quality testing.

Test-check of reports of soil and water samples analysed during 2008-09 in Soil and Water Testing Laboratory, College Tilla, Agartala disclosed the following:

- (i) Out of 551 water samples tested, 453 samples (82 per cent) were found highly acidic (pH range: 5.5 and below) and 142 samples (26 per cent) were found strongly alkaline (Range: 9 and above).
- (ii) Out of 472 soil samples tested, in 362 cases (77 per cent) the percentage of clay ranged between 5 and 38 which is much below the desired range of 70 per cent. Sand percentage varied between 5 and 25 while the desired level is 30 per cent in 121 cases (26 per cent) and in the case of 88 samples (17 per cent), pH value¹⁸ was found in the range of 4 to 4.5 against the acceptable range of 6.5 to 7.5.

The results of analysis indicated that 106.31 hectares tested area was below the required quality for pisciculture. Evaluation report or remedial measures prescribed/initiated by the Department were not on record. During the exit conference, the Government, while agreeing to the audit observation, assured that the corrective steps recommended after the laboratory evaluation would henceforth be documented.

3.1.11.3 Fish Feed Analysis Laboratory

A Fish Feed Analysis Laboratory (FFAL) was established in 2006-07 at College Tilla, Agartala to analyse sample of fish feed received from the districts for estimation of protein, fat, carbohydrate, ash etc.

During 2007-09, test for estimation of only protein was done in respect of 169 samples (2007-08: 78 nos. and 2008-09: 91 nos.) received from the four districts. Out of these, 53 samples were found sub-standard¹⁹. Due to non-availability of required

¹⁶ Agartala, Sonamura, Udaipur, Belonia, Kamalpur, Kanchanpur, Gandacharra and Kumarghat.

¹⁷ 6,540 water samples and 3,211 soil samples were tested covering a water area of 1,393 hectares and 1,203 hectares respectively out of total water area of 25,253.56 hectares.

¹⁸ Hydrogen ion concentration – it is a scientific unit for measuring acidity or alkalinity of a given sample.

¹⁹ Protein content was below 20 per cent.

lab equipment, other analysis like fat, carbohydrate, ash etc. were not conducted in the laboratory.

Instances of utilisation of inferior fish feed and untested fish feed noticed during audit were as follows:

(i) Procurement and distribution of Sub-standard Fish Feed

During 2007-09, three Superintendent of Fisheries (SFs), (Sadar, Bishalgarh and Khowai) procured and distributed 1089 MT²⁰ of fish feed, out of which 259 MT²¹ worth Rs.30.22 lakh²² was found to be substandard according to the laboratory reports. No action could be initiated as the supply order did not provide for penalty clause for supply of non-standard fish feed.

(ii) Procurement and distribution of Fish Feed without quality testing

During 2007-09, Superintendent of Fisheries, Sadar, Udaipur, Bishalgarh and Khowai procured and utilised 609 MT of fish feed worth Rs.74.89 lakh²³ without testing the quality.

The Government in reply stated (September 2009) that the required equipment was procured during 2008-09 and analysis of all the components would be done henceforth.

3.1.11.4 Fish Health Investigation Centre (FHIC)

A FHIC (a project under CSS with funding ratio of 75:25 between the Central and State Governments) was established at College Tilla, Agartala during 2004-05 by the FFDA, West. The project cost was Rs.30 lakh (Rs.25 lakh for construction of the building and Rs.5 lakh for purchase of laboratory equipment). The fund was released to the Agency in January 2002 without specifying any date for completion of the project. The prime objectives of the Centre were to:

- (i) increase the production level upto a limit of 4,000 kg/ha/annum in ponds, tanks and mini-barrages by accurate application of technology through proper research oriented programmes,
- (ii) arrange training on water quality and fish health investigation,
- (iii) develop technologies by utilising locally available bio-mass/bio-products to replace traditional fishery inputs,
- (iv) overcome the disease problem of fish in the State as well as water quality management, and
- (v) conduct limnological studies of all water bodies in the State.

²⁰ SF, Sadar: 419 MT, SF, Bishalgarh: 263 MT and SF, Khowai: 407 MT.

²¹ SF, Sadar: 79.51 MT, SF, Bishalgarh: 14.56 MT and SF, Khowai: 165 MT.

²² SF, Sadar: Rs.9.83 lakh; SF, Bishalgarh: Rs.1.83 lakh and SF, Khowai: Rs.18.56 lakh.

²³ SF, Sadar: 114 MT, valued at Rs.14.18 lakh; SF, Udaipur: 285 MT, valued at Rs.35.54 lakh, SF, Bishalgarh: 189 MT valued Rs.22.65 lakh and SF, Khowai: 21 MT valued Rs.2.52 lakh.

Scrutiny revealed that only the building has been constructed at a cost of Rs.29 lakh and Lab equipment for bacteria culture, air compressor, microscope etc, which were the critical components of the investigation centre, were not purchased as of June 2009. The FHIC was being used as water and soil testing laboratory and for conducting departmental training programmes.

In reply the Government stated (September 2009) that the objectives of FHIC to develop technologies, disease control, water quality management etc. took a backseat in view of the priority for increasing the productivity of fish in the State as targeted in the Perspective Plan.

The reply is self contradictory, as the activities planned for the FHIC were conditions required to increase production as emphasised in the project proposal.

3.1.11.5 Human Resource Management

As of March 2009, against the overall sanctioned strength of 1,288, there were 1,136 persons (88 *per cent*) in position while overall vacancy was 152 (12 *per cent*). Scientific assessment of manpower requirement to match the increased activities as well as deployment of manpower was not done by the Department. The Directorate could not furnish the actual number of sanctioned posts against each field office. Though overall vacancy was marginal (12 *per cent*), the vacancies in key functionaries (Fishery Officer) was 23 against a sanctioned strength of 98, resulting in a shortage of 23 *per cent*.

Vacancies in the key functional posts *viz* 23 Fishery Officers, 21 Fishery Assistants and 5 Junior Engineers were managed by the Department by distributing the work load.

Government stated (September 2009) that efforts were being made to fill up the vacant positions.

3.1.11.6 Training of Fishery Assistants

Fishery Assistants (FAs) were to be trained immediately after their appointment to acquaint them with the existing and modern pisciculture. But scrutiny of records of seven units²⁴ test-checked revealed that 97 FAs were trained only after three to 28 years of their joining. This resulted in delay in awareness and capacity building among the staff to use modern and scientific techniques in pisciculture to be passed on to the fish farmers in the State.

Government stated (September 2009) that the candidates were sponsored for training outside the State before setting up the TFTI at Udaipur which resulted in delay in imparting training and that all the pre 2000-01 FAs were trained.

3.1.11.7 Aquaculture of alternate/genetically improved variety

For large scale production and distribution of prawn seeds among the fish farmers, 'Fresh Water Prawn Hatchery Units' were established at Agartala, Kumarghat and

²⁴ SF of Udaipur, Sadar, Khowai, Bishalgarh, Belonia, TFTI and the Directorate.

Udaipur in 1999-2000, 2002-03 and 2004-05 respectively. Audit revealed that the production in Kumarghat hatchery was 1.28 *per cent* to 2.30 *per cent* of the capacity (250 lakh post larvae or 150 lakh juvenile per year) projected by the Department in the project proposal and approved by the GOI. Similarly, the hatchery at Tripura Fisheries Training Institute at Udaipur also could produce only 29 to 50 *per cent* of the projected capacity (varying between 2.50 lakh to 5.50 lakh Juvenile) during 2004-09.

Government in reply (September 2009) stated that prawn seed production in artificial environment, being a new technique, was being implemented in the State on an experimental basis which would require a few more years for perfection.

3.1.12 Reclamation of Water Bodies

Reclamation of existing water bodies was one of the important programmes envisaged in the Perspective Plan. The Plan envisioned that 40 *per cent* of the existing water bodies of the State required reclamation for fish culture. The following table shows the target fixed in the Perspective Plan and the achievement there against:

Table No. 3.1.9

(Water area in ha.)

Year	Reclamation			New Water area created	Total water area available in the State at the end of the year
	Target	Achievement	Shortfall (Percentage)		
2004-05	496	180.07	315.93 (64)	776.96	21,946.20
2005-06	474	220.46	253.54 (53)	1,093.08	23,039.28
2006-07	483	110.53	372.47 (77)	1,305.27	24,344.55
2007-08	512	42.74*	469.26 (92)	909.01	25,253.56
2008-09	525	34.40*	490.60 (93)	1,883.55	27,137.11
Total	2,490	511.06		5,967.87	

*Provisional

Source: Perspective Plan and Departmental figures

Percentage of shortfall in reclamation of water bodies ranged between 53 and 93 during 2004-09. The shortfall was mainly due to inadequate planning for reclamation in the AAPs.



Reclamation of RM Dighi at Udaipur



Construction of pond under Amarpur Nagar Panchayat

Table No 3.1.9 also disclosed that during the last five years, 5,967.87 hectares of new water areas were created registering an increase of about 28 *per cent* over the water bodies available at the beginning of the Plan.

Though creation of new water bodies was not among the priorities of the Department there was substantial improvement in development of new water bodies due to the introduction of NREGS²⁵ in the State. Above photographs show reclamation and new creation of water area in two Blocks.

3.1.12.1 Reclamation of water bodies and creation of new ponds by FFDAs

Out of the total target (2,490 hectares in Table No 3.1.9) of the Department, reclamation targeted by the four FFDAs were 169.04 ha. However, reclamation of only 85.22 ha was achieved by them. While against a target of creation of 52.30 ha new water bodies, only 44.77 ha were achieved during 2004-09 indicating a shortfall of 50 *per cent* in reclamation and 14 *per cent* in creation of new water bodies. The Government attributed the shortfall mainly to the shift of interest of the beneficiaries to various other schemes including NREGS where reclamation and creation of new water bodies were being covered.

3.1.13 Development of Post Harvesting facilities

With a view to strengthen the existing limited post harvesting facilities in the State and to prevent loss of produce and their sale in unhygienic conditions, the Department planned for upgradation/establishment of facilities for prevention, transportation and marketing of fish during 2004-12. The Department took up some works under post harvesting facility only in 2005-06.

Development of post harvesting facilities *viz* storage, transportation and marketing of fish and strengthening of the Fishermen Cooperative Societies were covered under a Centrally Sponsored Scheme 'Strengthening of Post Harvest Facilities (Central:75 and State:25)'. GOI released Rs.70 lakh (March 2005 and 2007) in two instalments which was spent during 2005-06 (Rs.50 lakh) and 2007-08 (Rs.20 lakh). The achievement *vis-à-vis* the Annual Action Plan of the Department in this regard was as follows:

Table No. 3.1.10

Items planned in the AAP 2005-06 and achievements			
Item	Target	Achievement	Shortfall Excess(+) Less (-)
Supply of Mini truck	3	10	(+) 7
Supply of Kiosks	143	85	(-) 50
PVC Crates	-	14	(+) 14
Modern fish selling market	1	1	--
Three wheeler auto van	--	1	(+) 1
Visicooler	--	7	(+) 7

Source: Departmental records.

²⁵ NREGS – National Rural Employment Guarantee Scheme.

Scrutiny during audit revealed the following:

- (i) No cold storage was constructed and no insulated van was supplied to Cooperative Societies against the target for construction of seven cold storages and procurement of four insulated vans. Instead, the Department supplied 10 Mini trucks (TATA 407) for transportation of fish, fish seed, fish feed etc. Reasons for not taking up the construction of cold storage and non-supply of insulated vans could not be made available to audit though called for.
- (ii) There was also shortage in construction of new markets and upgradation of existing markets.
- (iii) Further, the Department supplied one three-wheeler auto van and seven visicoolers to the Cooperative Societies which were not planned either in the Perspective Plan or in the Annual Action Plan.

Thus, the objective of improving the post harvesting facilities were only partially achieved for not taking up the construction of cold storage, and non-supply of insulated vans as proposed in the Perspective Plan.

3.1.14 Development of Fisheries through Cooperatives

Fisheries Cooperatives were formed for proper fisheries development by involving the fishermen who are directly or indirectly dependant on this trade for their livelihood. The cooperatives were to provide guidance to fisherman to bring out an overall improvement in their socio-economic status. The Societies were mainly financed by the Government by investment in share capital and by providing managerial subsidy.

According to the Directorate, as of September 2009, there were 110 Primary Fishery Co-operative Societies and one Tripura Apex Fishery Co-operative Society Limited (TAFCSL). The total number of members of these Societies was 16,480, which constituted only 21 *per cent* of the total fisherman population of 77,748 in the State. However, the Registrar of Co-operative Societies, Government of Tripura reported in June 2009 that at the end of 2008-09, there were 143 Societies out of which, 48 Societies (34 *per cent*) were dormant and 50 Societies (35 *per cent*) were running in loss. Records also revealed that the Department had invested Rs.10.86 lakh in dormant Societies and Rs.35 lakh in loss making Societies upto 2007-08. The reasons for failure, as revealed from a scrutiny of the Audit Report of the Societies, were mainly due to retention of cash balance by Ex-Secretary of the Societies outside the Society account, non-realisation of loans and advances and amount of rent receivable. The Department failed to keep proper vigil over the activities of the Societies which was corroborated by the following instances:

- (i) Scrutiny of Audit Report of “Rudra Sagar Utbastu Fisherman Samabay Samity Ltd.” for 2006-07 revealed that Rs.10.12 lakh being the amount of rent receivable remained outstanding as of March 2007.

- (ii) There was an outstanding lease rent of Rs.3.91 lakh as per Audit Report for 2007-08 of “Udaipur Samaj Kalyan Matsyajibi Samabay Samity Ltd.”
- (iii) Accounting books and records were not maintained properly.
- (iv) Meetings of the Board of Directors were not held regularly.
- (v) Audit of 107 societies²⁶ were in arrears for 3 to 7 years due to non-finalisation of accounts.
- (vi) Revenue of Rs.14.69²⁷ lakh on account of harvesting charges and royalty payable by Apex Co-operative Society to Government for marketing of fish harvested from reservoir remained outstanding as of March 2009. In reply, the Government stated that the outstanding amount is being recovered @ Rs. 10,000 per month starting from April 2009.

Government stated (September 2009) that the administrative control of the Cooperatives vests with the Co-operative Department and the role of Fisheries Department was restricted to technical guidance and financial support to the societies. The reply is not acceptable, as the societies receiving financial assistance are accountable for their activities to the funding Department.

3.1.15 Monitoring

There is no separate monitoring wing at the Directorate though creation of Monitoring Cell was proposed in the RPP. Each section in the Directorate is individually responsible for monitoring its activities. No centralised database exists on the status of various schemes/programmes implemented in the State. Although district level meetings were held, follow-up action was not documented due to which the effectiveness of the meetings remained unassessed.

As per the decision of the Department in 2004 and subsequent order issued in March 2008, the quantum of field visits/inspections of Government Sector Schemes and private fish farmers by the officials at different levels was four to 12 days in a month. For this purpose, a register of inspection was to be maintained at all levels. In none of the units audited, the registers of inspection carried out at different levels during the last five years (2004-09) were maintained. It could not, therefore, be ascertained whether the prescribed quantum of inspection and adequate follow up action were carried out. The Government while accepting the observation, assured future compliance.

3.1.16 Response to Audit

The State Finance Department issued instructions in July 1993 to watch over the receipt and disposal of Audit Notes/Inspection Reports issued by the Accountant General (Audit) which *inter alia* provides that (i) a register of disposal should be maintained by each office and (ii) reply to Audit Notes is to be furnished within one

²⁶ 35 nos.: 7 years since 2002-03, 10 nos.: 6 years since 2003-04, 15 nos.: 5 years since 2004-05, 17 nos.: 4 years since 2005-06, 30 nos.: 3 years since 2006-07.

²⁷ Total amount due upto 2003-04: Rs.20.81 lakh less amount recovered during 2004-09: Rs.6.12 lakh.

month from the date of their receipts. No such register was maintained by the Department as of March 2009. 16 paragraphs relating to 10 Audit Notes pertaining to the period from 1989-90 to 2008-09 were lying outstanding for want of reply.

3.1.17 Conclusion

The projected increase in productivity of fish over the years by the Department was neither reliable nor scientific. The goal of achieving self-sufficiency in the production of fish is far from achieved as the dependence on imports from other States/countries has gradually increased over the years. The Department has also not addressed the issues relating to quality of water and soil adequately in order to enhance the productivity of fish to the desired level. There is a need to take appropriate measures to increase the productivity of fish so that self-sufficiency could be achieved in fish production.

3.1.18 Recommendations

- An objective and rational method should be introduced to quantify the production of fish.
- Mid-term evaluation should be conducted to adjust the targets, which were formulated on the basis of lower average productivity.
- Post harvesting facilities need to be fully implemented to ensure higher economic returns.
- Concrete action should be taken to combat the long term adverse effects of unfavourable characteristics of water and soil.
- The training needs of officials and fish farmers should be addressed.
- Management and supervision of the fish farmers' cooperatives should be strengthened.