

## CHAPTER II

### PERFORMANCE AUDIT

#### AGRICULTURE, FARMERS WELFARE AND CO-OPERATION DEPARTMENT

#### Working of Fisheries Department

##### *Executive summary*

Gujarat has a coast line of 1,600 kms. The area available for fishing activities extends from Lakhpat in Kachchh district to Umargaon in Valsad district.

The Performance Audit (PA) covering the period from 2012-13 to 2016-17 was carried out to assess whether the Department prepared detailed plans/schemes/programmes for the development of fisheries sector in the State; whether the funds made available were adequate and utilised in an economic, efficient and effective manner.

During 2012-17, the marine fish production of the State constituted about 20 *per cent* of the all India marine fish production while inland fish production of the State was little more than one and half *per cent* of the all India inland fish production. Audit observed that the Department prepared a Five Year Plan (2012 -17) with cumulative targets to be achieved at the end of the Plan period.

Under Inland fisheries, against the potential of 2.49 lakh MT *per annum* of fish production, the Department has so far exploited 45 *per cent* only. In the Inland fisheries schemes, the achievement against the target of various sub-schemes ranged from Nil to 421.43 *per cent*. Audit observed higher achievement in some sub-schemes due to higher demand by the beneficiaries under those sub-schemes. The additional funds required were re-appropriated from sub-schemes where funds were not required. The Department did not have a marketing polycritical to its success but it was assisting the small vendors, processing plant owners, *etc.* through sub-schemes like insulated box, assistance to women self-help groups, upgradation of processing plants and machinery, *etc.*

The scheme for Fish Culture Cage under *Rashtriya Krishi Vikas Yojana* was not implemented during 2012-17. While in State plan scheme for Fish Culture Cage, no expenditure was incurred during 2014-15 and 2016-17. In both the schemes, while the Department parked the funds with other agencies, it reported utilisation of funds by showing achievement of financial targets.

The Department mapped only 12,165.80 ha of land for brackish water aquaculture upto September 2017 against the availability of 89,340 ha of

land. Besides, only 1,842.21 ha of land was brought under brackish water aquaculture during April 2012 to September 2017.

As on 31 March 2017, the total marine fish production of Gujarat was 6.99 lakh MT *per annum*, which was around 99 *per cent* of the marine fish potential available with the State. It contributed substantially (around 87 *per cent*) in the total fish production of the State. Under the schemes relating to Marine fisheries, the achievement against target under various sub-schemes ranged from Nil to 415 *per cent*. While nil/ low achievement in some sub-schemes was due to no demand or not taking up the work, higher achievement in other sub-schemes was due to higher demand. The infrastructure projects for upgradation of Fish Landing Centres and Fisheries Terminal Division financed by National Fisheries Development Board have been delayed due to slow pace of execution. The Department failed to carry out works for construction of nine new harbours as envisaged in the 12<sup>th</sup> Five Year Plan thereby depriving better facilities to the fishermen and fishing community.

The Department provided assistance/subsidy under the Diesel VAT subsidy scheme. As on 31 March 2017, there was a shortfall in release of funds for subsidy of ₹ 310.50 crore by GoG to the Department for reimbursement to the eligible fishermen.

The Government of Gujarat (GoG) had not issued any notification, regulation and directions for adoption of uniform fishing ban period thereby defeating the objective of conserving and effective management of fishery resources. The Department did not conduct any impact evaluation of the schemes factoring in the specific needs of the inland, marine and brackish water fish farmers. Therefore, the Department could not assess whether the desired objectives of fisheries development were achieved.

## 2.1 Introduction

Gujarat has a coast line of 1,600 kms which is broken by several bays, inlets, estuaries and marshy lands. The area available for fishing activities extends from Lakhpat in Kachchh district in north to Umargaon in Valsad district in south. Important commercial varieties of fish namely Pomfret, Jew fish, Bombay duck, Shrimp, *etc.*, are caught in large quantities in these areas. Fishing is undertaken in two types of water namely inland<sup>1</sup> and marine<sup>2</sup>.

According to the Eighteenth Live Stock Census 2007, there are 1,058 fishing villages in the State, classified into Marine (260), Inland (716) and Estuarine<sup>3</sup> (82). These villages were inhabited by 5.59 lakh fishermen, out of which 2.18 lakh were active fishermen who were engaged in fishing, marketing of fish

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<sup>1</sup> Inland fishing refers to fish rearing areas in fresh and brackish water in land.

<sup>2</sup> Marine fishing refers to fish rearing areas in ocean water or sea waters and includes coastal, offshore and deep sea fishing.

<sup>3</sup> Estuarine occurs where fresh water from rivers and streams meets with the salty sea water. This environment supports a variety of fish habitats.

and repairing of boats/nets, etc. As at the end of March 2017, there were 34,848 fishing boats registered in the State.

## 2.2 Organisational Set up

The office of the Commissioner of Fisheries (Department) is the nodal department for regulation of fishing activities in the State. The Department regulates the application of Merchant Shipping Act, 1958 for registration of fishing boats and Gujarat Fisheries Act, 2003 for grant of fishing licence. The Department also implements Government schemes/ programmes and undertakes development of new infrastructure and other facilities for the fishing sector and community in the State.

The Department has three Fisheries Terminal Divisions, two Fishing Ports and 18 Fish Landing Centres. Besides, it has five fish seed production centres.

The Department works under the overall jurisdiction of the Agriculture, Farmers Welfare and Co-operation Department, Government of Gujarat (GoG). It is headed by Principal Secretary and assisted by Deputy Secretary and Under Secretary (Fisheries).

The Commissioner of Fisheries is assisted by a Joint Commissioner of Fisheries and a Deputy Commissioner of Fisheries, six Deputy/Assistant Directors, one Deputy Collector, one Chief Engineer and one Accounts Officer. There are five<sup>4</sup> regional offices headed by Deputy Directors and 35 division offices<sup>5</sup> under the regional offices, spread across the State.

## 2.3 Gujarat's contribution to All India Fish production

The details of marine and inland fish production in India as well as Gujarat for the period 2012-13 to 2016-17 are given in **Table 1** below:

**Table 1: Fish Production during 2012-17**

Year	Marine Fish production (in lakh MT)			Inland Fish production (in lakh MT)		
	All India	Gujarat	Share of Gujarat (in per cent)	All India	Gujarat	Share of Gujarat (in per cent)
2012-13	33.21	6.93	20.87	57.20	0.95	1.66
2013-14	34.43	6.95	20.19	61.41	1.03	1.68
2014-15	34.91	6.98	19.99	65.78	1.11	1.69
2015-16	36.30	6.97	19.20	71.65	1.12	1.56
2016-17 (Prov.)	NA	6.99	NA	NA	1.13	NA
<b>Total</b>	<b>138.85</b>	<b>34.82</b>		<b>256.04</b>	<b>5.34</b>	

(Source: Fisheries Statistics of the Department; Statistics for 2016-17 were not available)

The State's contribution to the all India marine fish production during the period 2012-13 to 2016-17 was substantial at around 20 per cent. Gujarat leads in marine fish production in India as on March 2016. However, the State's inland fish production averaged little more than one and half per cent of the all India inland fish production during the same period. As on March 2016, Gujarat ranked 17<sup>th</sup> in inland fish production in India. The growth in fish production

<sup>4</sup> Surat, Vadodara, Ahmedabad, Rajkot and Veraval.

<sup>5</sup> Headed by Assistant Director/ Superintendent of fisheries.

within the State as well as percentage share of both marine and inland fisheries of the State in the all India fish production remained almost consistent during the period 2012-13 to 2016-17.

## 2.4 Budgetary Provision and Expenditure

GoG provides funds to the Department for implementation of schemes by way of budgetary allocations in the State Plan schemes. During the year 2012-13 to 2016-17, the GoG released funds of ₹ 384.31 crore (including share of GoI) to the Department against which it incurred an expenditure of ₹ 383.34 crore *i.e.*, almost 100 *per cent* of the funds made available to the Department was utilised during the review period.

Further, the Department also received funds for projects under *Rashtriya Krishi Vikas Yojana* (RKVY) and infrastructure projects financed by National Fisheries Development Board (NFDB). Against the receipt of funds of ₹ 17.20 crore under RKVY and ₹ 22.34 crore from NFDB, the Department incurred expenditure of ₹ 4.87 crore and ₹ 11.86 crore respectively.

In addition to the above, a non-plan scheme on Diesel VAT subsidy to fishermen with a total expenditure of ₹ 421.23 crore during 2012-17 was also operated.

## 2.5 Scope of Audit

The Performance Audit (PA) was conducted during December 2016 to June 2017 and covered the period from 2012-13 to 2016-17. Out of 22 Plan schemes<sup>6</sup> in operation during 2012-17, nine schemes were selected for test-check in audit (**Appendix II**). Further, under these nine schemes, 35 sub-schemes involving expenditure of ₹ 145.99 crore were selected for detailed test-check in audit. Besides, the Non Plan scheme of Diesel VAT Subsidy was also selected for detailed audit examination. In addition to above, six projects approved under RKVY and seven infrastructure projects financed by NFDB were also reviewed. Nine offices<sup>7</sup> of the Department involving expenditure of ₹ 361.52 crore (44.93 *per cent* of total expenditure<sup>8</sup>) on the above sub-schemes/non-plan scheme were selected for detailed scrutiny.

## 2.6 Audit Objectives

The objectives of the Performance Audit were to assess whether:

- the Department prepared detailed plans for the development of fisheries sector and implementation of schemes/programmes relating thereto in the State;
- the funds made available to the Department were adequate and were utilised in an economic and efficient manner;

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<sup>6</sup> Six Inland fisheries (**Appendix III**), Eight Marine fisheries, (**Appendix IV**), Four Welfare schemes and Four General schemes.

<sup>7</sup> Head office and division offices at (i) Anand, (ii) Valsad, (iii) Rajkot, (iv) Veraval, (v) Porbandar, (vi) Dahod, (vii) Himatnagar and (viii) Surat.

<sup>8</sup> Total expenditure under plan scheme ₹ 383.34 crore *plus* expenditure on Diesel VAT Subsidy Scheme under non-plan ₹ 421.23 crore.

- the implementation of schemes/works was efficient and effective and the intended objectives of the schemes/works were achieved; and
- internal control and monitoring mechanisms were effective.

## 2.7 Audit Criteria

The criteria used for assessing audit objectives were *provisos* of Gujarat Fisheries Act, 2003, Gujarat Fisheries Rules, 2003, Merchant Shipping Act, 1958; Five Year Plan, Annual Plan and Budget proposals for the grants; Guidelines for implementation of schemes/ programmes; and Gujarat Budget Manual, Gujarat Financial Rules and Gujarat Treasury Rules.

## 2.8 Audit Methodology

The audit objectives were explained to the Department in an entry conference held on 25 January 2017. During the course of audit, records were examined, discussions were held with department officials, site visits were made, audit queries issued and replied by the department. The draft Performance Audit report issued in July 2017 was discussed with the Secretary (Animal Husbandry, Cow Breeding, Fisheries & Co-operation) and other officials of the Department during the exit conference held on 8 September 2017. The reply of the Commissioner of Fisheries was received on 19 September 2017 and the views expressed by them have been considered while finalising this Report. The reply of GoG is awaited (December 2017).

## 2.9 Audit Findings

The audit findings on aspects of planning, financial management, implementation of schemes/infrastructure projects and internal control and monitoring mechanism are discussed in the succeeding paragraphs.

## 2.10 Adequacy of Planning

Planning requires not only setting up long term targets, but also clearly laying out targets to be achieved within medium and short term. Audit observed that the Department did not have any marketing policy critical to its success. Scrutiny of records revealed that the Department prepared a five year plan for the period 2012-17 which showed only the cumulative targets of a few components<sup>9</sup> of the schemes, to be achieved at the end of the plan period. The five year plan, however, did not indicate year wise targets and the matching financial outlays for various components included in the plan period.

The annual operational budget (*Kamgiri Andajpatra*) prepared by the Fisheries Division under GoG depicts the expenditure incurred on various schemes (Central and State) upto previous years and the estimated expenditure to be incurred in the current year to which the annual operational budget/estimates pertains.

<sup>9</sup> Development of Brackish Water Aquaculture, Development of Fishing Harbours, Development of Fish Landing Centre, Fish production, Mechanisation of boats and Fish seed production.

Audit observed that the physical targets were fixed in the annual operational budget based on the achievements of the earlier years. As such these did not flow from the five year plan of the Department. These physical targets fixed under various schemes were not being revised based on the revised financial outlay allocated for the schemes. Even, the physical targets fixed for field offices as per original budget estimates were not revised in accordance with the revised financial outlay for the field offices. The Department stated (September 2017) that necessary instructions have been issued to the concerned officials to take due care in future.

## 2.11 Financial Management

### 2.11.1 Allocation and expenditure

Each year, GoG approves budget against scheme-wise proposals submitted by the Department. The Department also submits revised budget estimates in November each year after assessing the expenditure incurred from the amounts released under each scheme. The year-wise details of original budget estimates, revised budget estimates, funds allotted, expenditure incurred, etc., during 2012-17 are given in **Table 2** below:

**Table 2: Original Budget Estimates, Revised Budget Estimates and Expenditure**

(₹ in crore)

Year	Budget Estimates			Allotted budget	Expenditure	Percentage of variation between original and revised budget estimates	Percentage of expenditure to original budget estimates
	Original	Revised	Difference				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
2012-13	77.00	72.76	4.24	73.63	73.19	5.51	95.05
2013-14	80.00	58.95	21.05	53.26	53.20	26.31	66.50
2014-15	86.59	70.79	15.80	60.88	60.70	18.25	70.10
2015-16	116.97	115.15	1.82	95.00	94.98	1.56	81.20
2016-17	357.50	108.32	249.18	101.54	101.27	69.70	28.33
<b>Total</b>	<b>718.06</b>	<b>425.97</b>	<b>292.09</b>	<b>384.31</b>	<b>383.34</b>		

(Source: Plan reports of the Department)

As could be seen from the **Table 2**, there were variations in the original budget estimates and revised budget estimates during 2012-17 ranging from two (2015-16) to 70 per cent (2016-17). Further, the actual expenditure against the original budget estimates also varied from 28 to 95 per cent during the period. This indicated that the original budget estimates were not prepared based on realistic projections with reference to various schemes implemented by the Department except during 2012-13. During 2016-17, against the original provision of ₹ 357.50 crore, the Department revised its requirement to ₹ 108.32 crore. The downward revision was mainly because GoI had not released its part of funds (40 per cent) under a partial centrally sponsored scheme on 'Construction of docks, berths and jetties'. Consequently, the GoG also did not release its 60 per cent share.

The Department stated (September 2017) that necessary instructions had been given to all concerned to take due care in future.

## 2.12 Inland Fisheries

India has potential of 45 lakh MT *per annum* fish production in Inland fisheries. Gujarat has potential to produce 2.49 lakh MT<sup>10</sup> *per annum* of fish from inland fisheries. To promote inland fisheries and provide support to the fishermen and fishing sector, the Department implemented six schemes and 61 sub-schemes during 2012-17 of which we test-checked four schemes and 23 sub-schemes.

### 2.12.1 Target and achievement of Inland fish production

The target and achievement in inland fish production in Gujarat during 2012-17 is given in **Table 3** below:

**Table 3: Inland production – Target vis-à-vis Achievement**

Year	Inland fish production		
	Target (in MT)	Production (in MT)	Achievement (in per cent)
2012-13	85,000	94,930	111.68
2013-14	95,000	1,02,913	108.33
2014-15	96,000	1,11,479	116.12
2015-16	1,05,000	1,12,232	106.89
2016-17 (Provisional)	1,10,000	1,13,272	102.97

(Source: Fisheries Statistics of the Department and information furnished by the Department)

The Department achieved the target set for inland fish production during 2012-17. The inland fish production increased from 0.95 lakh MT in 2012-13 to 1.13 lakh MT in 2016-17. However, against the potential of 2.49 lakh MT, the Department has so far exploited the potential to the extent of 45 *per cent* only leaving a huge untapped potential. The Department needs to revisit its plans/programmes and prioritise development of inland fisheries to exploit the full potential of inland fisheries in the State.

The Department stated (September 2017) that in order to increase inland fish production, programme for “Mission Fingerlings” and “Fish Culture Cage” have been implemented.

### 2.12.2 Target and achievement of schemes/sub-schemes

The Department operated scheme for fish seed production and development of inland fisheries (FSH-2)<sup>11</sup> with the objective of creating self-employment opportunities to the people and increase fish production. Besides, two other schemes for production of fish through Fish Farmers Development Agency (FSH 4) and development of fisheries in brackish water (FSH 5) with its various sub-schemes were also operated by the Department.

The targets vis-à-vis achievement of the schemes/sub-schemes in Inland fisheries during 2012-17 are given in **Appendix III**. A review of target and achievements of the schemes revealed the following:

<sup>10</sup> As per the Fisheries Statistics of Gujarat-2015 prepared by Kamdhenu University.

<sup>11</sup> The scheme was divided in to three categories *viz.*, FSH-2 (Normal), FSH-2 (Tribal) and FSH-2 Schedule Caste Sub Plan (SCSP).

- Under FSH-2 scheme (Normal), the achievement against target of various sub-schemes during 2012-17 ranged from Nil to 421.43 *per cent*. Under FSH-2 (SCS Plan), it ranged from Nil to 166.25 *per cent*. Similarly, in FSH-2 (Tribal), the achievement ranged from 39.47 to 217 *per cent*. Among the sub-schemes, excess achievement against the target was observed in storage of fish seed, boat and net, fish sales assistance to women (normal) and patrolling cum fish collection boat(normal). On the other hand, Audit observed under-achievement of targets in the sub-schemes of assistance for plastic crate, hatchery for colorful fish, rearing space development, fish seed hatchery, aerator assistance<sup>12</sup>, purchase of insulated box, fish culture cage and fishermen housing (SCSP and Tribal) during 2012-17.
- In the scheme on production of seeds through Fish Farmer Development Agency (FSH-4), the achievement was very low ranging from 1.54 to 3.69 *per cent*.
- In the scheme on development of fisheries in brackish water (FSH-5), the achievement against target of various sub-schemes ranged from Nil to 107.89 *per cent*. Higher achievement was observed in sub-schemes of training and aerator assistance. The sub-schemes of assistance for master mapping, shrimp farm construction, road infra development, shrimp farm renovation, sea weed culture and polythene liner-bird/dog fencing had low achievement against the targets fixed.
- As regards marketing of fisheries products, the Department was assisting the small vendors, processing plant owners, *etc.*, through sub-schemes like insulated box, assistance to women self-help groups, upgradation of processing plants and machinery, *etc.* During 2017-18, the Department introduced two new schemes *viz.*, construction of fish market in Surat Municipal Corporation (₹ 3 crore) and construction of processing plant to Co-operative societies (approximately ₹ 5crore).

Audit observed (December 2016 to June 2017) that the higher achievement in some sub-schemes was due to higher demand or requirement of components under the sub-schemes by the beneficiaries. The additional funds were re-appropriated from other sub-schemes where funds were not required. Nil or low achievement were due to lower demand for the components of the sub-schemes and deficiencies in their execution.

The Department needs to assess the requirement of various components of the sub-scheme and fix the targets based on demand of various components.

In reply, the Department stated (September 2017) that in future, the demand for the component and achievement of earlier years' would be considered while fixing targets.

### **2.12.3 Adequacy of production of spawn and fingerling**

The Department undertakes fish seed production at its farms and seasonal ponds for own usage as well as supplying spawn, fry and fingerlings to lessees of

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<sup>12</sup> Aerators are various devices used for aeration, or mixing air with another substance such as soil or water. These devices are used to add oxygen to the water. Aerator assistance is to purchase such aerator.



ponds and reservoirs for fish production. The fish seed production process involves rearing of (i) spawn to fry and (ii) fry to fingerling. The spawn to fry is reared in 25 days. Similarly, the stage from fry to fingerling rearing requires 50 days. The fry or fingerling so reared, are stocked in the reservoirs and ponds for ultimate fish production. The recovery rate of spawn to fry is estimated at 30 *per cent* whereas from fry to fingerling, recovery rate is estimated at 35 *per cent*. Overall, the recovery rate of spawn to fingerling is estimated at 12 *per cent*.

The Department undertakes spawn production at its seven hatcheries. The details of spawn production<sup>13</sup> for the years 2015-16 and 2016-17 are shown in **Table 4** below:

**Table 4: Spawn production in Hatcheries of the Department**

(Number in crore)

Name of the Office/ Farm	2015-16		2016-17	
	Target	Achievement	Target	Achievement
Valsad (Palan)	13	10.62	13	12.21
Surat (Pipodara, Kosamada)	26	29.49	29	23.48
Ukai	25	25.60	27	24.68
Anand (Lingda)	12	10.98	12	11.04
GFCCAL (Valod, Vankaner)	14	18.15	14	17.02
<b>Total</b>	<b>90</b>	<b>94.84</b>	<b>95</b>	<b>88.43</b>

(Source: Information furnished by the Department)

Audit observed that the Department exceeded its targets in 2015-16 but fell short of target in 2016-17 by seven *per cent*. However, it had not linked its targets for spawn production with the estimated requirement of fingerlings for the years 2015-16 and 2016-17. The total requirement of fingerlings for the year 2015-16 and 2016-17 was estimated at 11.80 crore and 18.26 crore, respectively. The Department considers recovery of fingerling from the spawn at the rate of 12 *per cent*. At this rate, the Department was required to produce 98.33 crore spawns in 2015-16 and 152.17 crore spawns in 2016-17. The actual production was less than required by 3.55 *per cent* in 2015-16 and by 41.89 *per cent* in 2016-17 respectively. Audit observed that the Department did not have a system of backward planning for spawn production from its own hatcheries to achieve the targeted fish production. Audit also observed that due to inadequate supply of fingerlings, the lessees obtained fingerlings from the private hatcheries. During 2012-17, 15.80 lakh fingerlings were purchased from private parties for which the Department gave subsidy to lessees amounting to ₹ 2.30 lakh.

The Department stated (September 2017) that due to seepage in fish ponds, geographical condition and irregular rainfall, stage wise rearing of spawn could not be done at optimum level. Further, under the programme of Mission Fingerlings, it planned to develop eight hatcheries and 315 ha of rearing space to achieve the target for production of fingerlings.

Thus, the Department corroborated that it was not able to provide required spawn for production of targeted fingerlings.

<sup>13</sup> Details of spawn production for the period prior to 2015-16 were not made available to audit.

#### 2.12.4 Fish seed rearing centres

The Department has 25 fish seed rearing centres comprising hatcheries and ponds at various places spread across the State. Nursery ponds are used to stock the fish seed for rearing from spawn to fry while rearing ponds are used for rearing the fry to fingerling. Stocking ponds are used for both rearing the fry to fingerling and stocking fingerling before its supply to the lease holders for fish production. The details of area of ponds (Nursery, Rearing and Stocking) in the 25 fish seed rearing centres and their status as on 31 March 2017 are given in **Table 5** below:

**Table 5: Status of ponds as on 31 March 2017**

Sl. No.	Nature of Ponds	Total No. of ponds	Area (in ha)	No. of ponds in use	Area (in ha)	Percentage of number of ponds in use
1	Nursery	158	8.08	105	5.86	66.46
2	Rearing	278	57.37	192	29.81	69.06
3	Stocking	38	12.67	24	9.01	63.16
<b>Total</b>		<b>474</b>	<b>78.12</b>	<b>321</b>	<b>44.68</b>	<b>67.72</b>

(Source: Information furnished by the Department)

Out of the total 474 ponds, 321 ponds were actually in use as on 31 March 2017. The utilisation of nursery, rearing and stocking ponds for fish rearing purpose was 66, 69 and 63 *per cent*, respectively. The non-utilisation of 153 ponds was mainly due to seepages and growth of vegetation in ponds, insufficient rain, ponds under renovation, shortage of technical staff, *etc.* The Department stated (September 2017) that efforts are being made to make more ponds available for fish seed production/rearing.

#### 2.12.5 Development of Inland fish production through Fish Culture Cage

**2.12.5.1** In 2012-13, 'Fish culture in cages' was first introduced as an RKVY project under National Mission for Protein Supplement with the objective of increasing the inland fish production, increasing the earnings of the fishermen and creating new opportunities for employment. The project envisaged installation of 240 cages with an estimated fish production of 2.5 metric ton (MT) *per cage* and 600 MT *per annum*. The Department invited (December 2012) tender for purchase of 192 cages worth ₹ 3.20 crore. The tender was rejected (August 2013) by GoG as the tender documents were faulty. Subsequent tenders invited in 2015 and 2016 were also cancelled and could not be finalized due to non-receipt of qualified bids, non-finalisation of tender within time limit, adverse lab test reports, *etc.* In the meantime, the Department parked (January 2015) ₹ 9.18 crore received in March 2013 under RKVY in liquid deposits with Gujarat State Financial Services Limited (GSFSL) which are still invested there (December 2017). However, the Department reported utilization of funds to GoG. Thus, despite having requisite funds for the project, the non-finalisation of tender led to its non-implementation and consequently, the non-achievement of the objective besides funds lying idle for more than five years (December 2017).

The Department stated (September 2017) that the project would be implemented during the current year and tenders had been invited in September 2017.

**2.12.5.2** Apart from the RKVY scheme of 2012-13 for fish culture cages, GoG introduced (August 2014) a sub scheme called Field Level Demonstration which provided financial assistance of 90 *per cent* of the cage unit cost to the beneficiaries. Under the scheme, stocking of fish seeds is done in a cage, fish feed is provided from outside and rearing is undertaken in suitable conditions. The cost of each cage unit consisting of a cage, fish seed and fish feed was estimated at ₹ 3 lakh *per unit*.

The scheme was implemented from 2014-15 onwards. The target and achievement under the scheme is given in **Table 6** below:

**Table 6: Target vis-à-vis Achievement of Cage Units**

Year	Physical (number of cages)			Financial (₹ in lakh)		
	Target	Achievement	Percentage	Target	Achievement	Percentage
2014-15	67	36	54	181	105.30	58
2015-16	67	20	30	181	27.00	15
2016-17	120	0	0	180	0 <sup>14</sup>	0
<b>Total</b>	<b>254</b>	<b>56</b>	<b>22</b>	<b>542</b>	<b>132.30</b>	<b>24</b>

(Source: Scheme files of the Department)

It can be seen from **Table 6** that during 2014-15, 2015-16 and 2016-17 achievement against physical targets was only 54 *per cent*, 30 *per cent* and nil respectively and of financial targets was only 58 *per cent*, 15 *per cent* and nil, respectively. The low coverage was due to lesser number of applications received from beneficiaries.

Audit observed that:

- As per the Department's interpretation of the scheme, assistance was to be given for the cage unit only and no support was to be provided for fish seed and fish feed. Accordingly, the financial assistance granted to beneficiaries for 2014-15 (given in 2015-16) and 2015-16 was restricted to ₹ 1.35 lakh *per cage per application*. Therefore, the Department did not provide the financial assistance as envisaged under the scheme.
- During 2014-15, 39 applications were received. However, the empanelment of cage suppliers was delayed and finalized at the end of 2014-15. As a result, the Department could not release any assistance to the beneficiaries during 2014-15. Instead, the Department parked ₹ 105.30 lakh<sup>15</sup> with various Fish Farmers Development Agencies (FFDA). The Department released financial assistance of ₹ 52.65 lakh<sup>16</sup> during 2015-16. The balance amount of ₹ 52.65 lakh was still lying with various FFDA's (December 2017).
- In 2016-17, the scheme was modified to give financial assistance of 50 *per cent* of the unit cost to the beneficiaries. The Department received ₹ 93 lakh against 62 applications received from beneficiaries. Again, since the empanelment of suppliers of the unit was delayed and finalised only in

<sup>14</sup> ₹ 93 lakh received during 2016-17 was not utilised but parked by the Department with GSFSL and hence nil achievement is shown.

<sup>15</sup> Received at the rate of ₹ 2.70 lakh *per unit*.

<sup>16</sup> Restricted only to the cost of ₹ 1.35 lakh *per cage*.

March 2017, no assistance was released to the beneficiaries in 2016-17. Funds worth ₹ 93 lakh received under the scheme were parked (May 2017) by the Department in GSFSL to avoid lapse of funds.

**Audit noticed that despite the fact that expenditure on the scheme was not incurred in the year of release i.e., 2014-15 and 2016-17 and the funds were parked with other agencies, the Department had reported utilization of funds by showing achievement of financial targets. Thus, the objective of promoting cage culture technology to increase fish production was not fully achieved.**

The Department stated (September 2017) that the funds lying with FFDA was received during 2014-15 and with GSFS pertaining to 2016-17 would be utilised in 2017-18.

Reply is not convincing because it does not state the reasons for restricting the assistance to cage unit only during 2014-15 and 2015-16. Besides, no justification was given for reporting utilisation of funds though the same were parked with other agencies.

## **2.13 Leases**

GoG had formulated (July 2003) the policy for leasing out village ponds/reservoirs under the control of village panchayats. Similarly, GoG formulated (February 2004) leasing policy for leasing out reservoirs i.e., irrigation ponds/reservoirs under the jurisdiction of irrigation department in the State for Inland Fisheries. As on 30 November 2016, there were 463 ponds/reservoirs under the control of village panchayats/irrigation department leased out in terms of the above two policies. The observation on the leasing of reservoirs/ponds are discussed below:

### **2.13.1 Delay in deciding lease of Vatrak reservoir led to loss of fish production and revenue**

As per conditions of the leasing policy of 2004, Gujarat Fisheries Central Cooperative Association Limited (GFCCAL) was to be given one reservoir on lease in each district at upset price<sup>17</sup>. The lease policy also provided that a *Mandali*/ Society/Institute which had any Government dues outstanding was ineligible for allotment of pond/reservoir on lease. Further, while the Department had full authority for implementation and administration of lease policy, only the GoG was authorized to give concessions, issue clarifications and decide on disputes on the lease policy.

GFCCAL requested (28 September 2011) allotment of Vatrak reservoir on lease. The upset price of the Vatrak reservoir was fixed by the Department at ₹ 0.03 crore. GFCCAL had outstanding dues of ₹ 3.26 crore payable to the Department towards various loans<sup>18</sup>, interest, penal interest *etc.*, as on March 2011. After protracted correspondence between the Department and the

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<sup>17</sup> It refers to minimum or reserve price at which allotment would be made on lease.

<sup>18</sup> Government loan, Working capital loans, NNP Machinery Loan, Cyclone Loan, NCDC Project Loan, EEC Project Loan and Interest-free Loan.

GoG on GFCCAL's request, the GoG directed GFCCAL in December 2014 to pay the outstanding dues before allotment of the reservoir on lease. GFCCAL paid (March 2015) the principal of ₹ 0.61 crore and requested (May 2015) GoG to waive the interest and penal interest of ₹ 2.91 crore (period upto March 2016).

Despite the Department's repeated request to GoG to take a decision on leasing of Vatrak reservoir during 2011 -2017, the matter was still pending at GoG level (May 2017). The delay in decision resulted in Vatrak reservoir lying idle and not available for fish production during this period. This also led to potential revenue loss towards lease rent of ₹ 1.68 crore<sup>19</sup> and loss of fish production of 325 MT<sup>20</sup> per annum.

The Department stated (September 2017) that in view of the non-payment of dues by GFCCAL, it has initiated the process of inviting fresh tenders for awarding lease of Vatrak reservoir. The reply notwithstanding, the delay in taking decision led to idling of the reservoir for more than five years.

## 2.14 Brackish Water Aquaculture

Out of the total area of 12.40 lakh ha<sup>21</sup> of land with brackish water in India, the potential for development of brackish water aquaculture was estimated at 8.67 lakh ha in the country. The production of shrimps is undertaken in brackish water. In the 12<sup>th</sup> five year plan (FYP), the Department had identified 89,340 ha of land available in Gujarat for the development of aquaculture in brackish water. Of the above, the Department targeted to bring in 50,000 ha of land under brackish water aquaculture in 12<sup>th</sup> FYP. The observations on the Department's efforts to develop brackish water aquaculture are discussed as under:

### 2.14.1 Land brought under brackish water aquaculture

With a view to bring brackish water under aquaculture, mapping is done to identify suitable land from the available land for aquaculture development. After mapping, further action is taken for allotment of land by the Revenue Department. **Table 7** below shows the progress in mapping and allotment of land for brackish water aquaculture:

**Table 7: Allotment of suitable land for Brackish Water Aquaculture as on September 2017**  
(Area in ha)

Sl. No.	Name of the District	Land available for aquaculture	Master Mapping done	Land allotted (March 2012)	Land allotted (September 2017)
1	Valsad	5,138.73	648.36	590.31	590.31
2	Navsari	12,037.18	3,813.34	1,705.44	3,214.35
3	Surat	19,200.00	1,178.33	1,168.50	1,331.50
4	Bharuch	33,208.00	3,178.56	1,436.00	1,496.00
5	Bhavnagar	1,125.00	673.00	51.14	111.44
6	Amreli	2,001.00	20.00	226.00	226.00
7	Junagadh <sup>22</sup>	1,493.00	722.00	2.00	52.00

<sup>19</sup> ₹ 0.28 crore (amount paid by earlier lessee for Vatrak reservoir) x 6 years (2011-12 to 2016-17).

<sup>20</sup> Average production at Vatrak reservoir for the period 2008-09 to 2010-11.

<sup>21</sup> Fisheries Statistics of the Department.

<sup>22</sup> This includes 50.00 ha in the newly constituted district of Devbhoomi Dwarka, which is included in 'Master mapping done' and 'Land allotted'.

Sl. No.	Name of the District	Land available for aquaculture	Master Mapping done	Land allotted (March 2012)	Land allotted (September 2017)
8	Jamnagar	4,104.00	1,351.21	00.00	00.00
9	Rajkot	3,200.00	330.00	00.00	00.00
10	Kutch	7,834.00	00.00	00.00	00.00
11	Porbander <sup>23</sup>	00.00	251.00	00.00	00.00
<b>Total</b>		<b>89,340.91</b>	<b>12,165.80</b>	<b>5,179.39</b>	<b>7,021.60</b>

(Source: 12<sup>th</sup>FYP 2012-17 of the Department and information furnished by the Department)

As can be seen from the **Table 7**, till September 2017, mapping of only 12,165.80 ha of land had been done. Thus, the Department failed to map the suitable land as per target fixed in 12<sup>th</sup> FYP. Out of the mapped land, 7,021.60 ha land had been actually allotted by the Revenue Department for brackish water aquaculture (September 2017). Thus, against the target of bringing in 50,000 ha of land under brackish water aquaculture during 12<sup>th</sup> FYP, only 1,842.21 ha of land was actually brought under brackish water aquaculture during April 2012 to September 2017.

#### **2.14.2 Status of lease of saline land for brackish water aquaculture**

The Revenue Department, GoG allotted land for brackish water aquaculture as per its land lease policy. As per the policy, the allotment of land would be made for brackish water aquaculture only after the Department did mapping of the suitable land. Audit observed that the Department had forwarded 29 applications to the Revenue Department during 2013-2016, which were pending for allotment as on June 2017. These applications involved saline land admeasuring 3,395.94 ha.

Audit observed that the Department did not initiate any follow up action after submission of 'Tumar'<sup>24</sup> to Revenue Department which resulted in delay in achievement of objectives of increasing shrimp production and further development of brackish water aquaculture.

The Department stated (September 2017) that the matter had been followed up with Revenue Department to clear pending 'Tumar'.

The reply of the Department was not supported by any records relating to the follow-up action taken (till August 2017) by the Department with the Revenue Department.

#### **2.14.3 Performance against targets for production of shrimps**

The Department had targeted bringing in 50,000 ha of land under brackish water aquaculture with an estimated shrimp production of 67,530 MT *per annum* in the 12<sup>th</sup> FYP. One of the important objectives envisaged in FYP was to increase shrimp production<sup>25</sup> for exports. This was with a view to earn more foreign exchange as well as utilise land for brackish water aquaculture to create more rural employment. It was estimated that 43,000 MTs of shrimp would be

<sup>23</sup> Master Mapping has been done based on the applications received from the beneficiaries though not included in the original 12<sup>th</sup> FYP.

<sup>24</sup> File of records relating to the applicant compiled by the Department and submitted to the Revenue Department.

<sup>25</sup> Shrimp farming is an aquaculture business that exists in a marine or freshwater environment, producing shrimp or prawns.

exported *per annum* by the end of 2016-17. The production of shrimps from brackish water for the year 2012-17 is given in **Table 8** below:

**Table 8: Shrimp Production vis-à-vis total Inland Fish Production**

Sl. No.	Year	Shrimp production(in MT)	Total Inland fish production (in MT)	Percentage of shrimp production
1	2012-13	5,413	94,930	5.70
2	2013-14	9,858	1,02,913	9.58
3	2014-15	27,058	1,11,479	24.27
4	2015-16	31,664	1,12,232	28.21
5	2016-17 (Provisional)	36,608	1,13,272	32.32
<b>Total</b>		<b>1,10,601</b>	<b>5,34,826</b>	<b>20.68</b>

(Source: Fisheries Statistics of the Department)

It could be seen from **Table 8** that the shrimp production from brackish water aquaculture contributed 21 *per cent* of the total Inland fish production in the State during 2012-17. Though the production of shrimps had gained pace during 2012-17, the envisaged annual target of production of 67,530 MT by 2016-17 was not achieved.

The Department stated (September 2017) that the target to bring 50,000 ha of land for brackish water aquaculture in 12<sup>th</sup> FYP was decided based on the preliminary feasibility report of Marine Products Export Development Authority, Valsad.

The reply is not convincing. The Department did not conduct any detailed survey/investigation or take further action based on the preliminary feasibility report. Further, the reply did not state the reasons for slow mapping of land already identified for brackish water aquaculture.

## 2.15 Marine Fisheries

Against the potential of 39 lakh MT *per annum* of marine fisheries in India, Gujarat has potential of 7.03 lakh MT *per annum* of marine fisheries. As on 31 March 2017, the total marine fish production of Gujarat was 6.99 lakh MT *per annum* which constituted 87 *per cent* of total fish production in the State. Gujarat leads in production of marine fisheries in India.

With a view to support marine fisheries, GoG implemented various schemes for equipping the fishermen, infrastructure development projects, non-plan scheme of Diesel VAT subsidy, upgradation projects financed by National Fisheries Development Board and RKVY projects. During 2012-17, the Department implemented eight schemes and 50 sub-schemes (**Appendix IV**) of which we test checked the records of three schemes and nine sub-schemes.

### 2.15.1 Target and achievement of Marine fish production

The target and achievement in marine fish production in Gujarat during 2012-17 is given in **Table 9** below:

**Table 9: Marine fish production – Target vis-à-vis Achievement**

Year	Marine fish production		
	Target (in lakh MT)	Production (in lakh MT)	Achievement (in per cent)
2012-13	7.00	6.93	99.00
2013-14	7.00	6.95	99.29
2014-15	7.00	6.98	99.71
2015-16	7.00	6.97	99.57
2016-17 (Provisional)	7.00	6.99	99.86

(Source: Fisheries Statistics of the Department and information furnished by the Department)

The Department has been very near to achieving the target set for marine fish production during 2012-17.

### 2.15.2 Target and Achievement of schemes/sub-schemes

The Department operated schemes for providing pre-requisite facilities at various fishing centres (FSH-7) and mechanisation of traditional fishing crafts (FSH-8) with the objectives of reducing pollution and increasing efficiency and cost effectiveness of fishing operations. Another Scheme for processing, maintenance and marketing of fishes (FSH-9) was also operated with an objective to provide incentive to marine fishing activity and processing units. This was to be done by providing assistance for purchase of modern machinery so that the units get better prices for their fish products in the international market. Each of the above schemes consisted of various sub-schemes under which assistance to the fishermen was provided. Besides two schemes FSH 6 and 19 for development of Fisheries Ports and FSH 20 for Assistance for Distress Alert Transmitter were also operated by the Department. In addition, two other schemes viz., Development rebate on High Speed Diesel {FSH-103 (12)} and Central assistance for National Security {FSH-103 (13)} were notified but were not in operation during the review period.

The targets vis-à-vis achievement of the six schemes<sup>26</sup> in Marine fisheries during 2012-13 to 2016-17 are given in the **Appendix IV**. A review of the targets and achievement of the schemes revealed the following:

- Under FSH-6 scheme for development of Fisheries Ports, the achievement was nil as the capital works for the same were in progress (June 2017).
- In other schemes, viz., FSH-7, 8, 9, 19 and 20 the achievement against the target ranged from Nil to 415 per cent. It was observed that the higher achievement in FSH-19 and FSH-7 was due to higher demand for components under the sub-schemes. Among the sub-schemes, the excess achievement was observed in solar light, insulated box, life saving equipment, toilets in boats and generator set. Lower achievement was noticed in sub-schemes of pre-fabricated cabins, distress alert transmitter and four stroke machines due to lower demand. Nil achievement was seen in sub-scheme of women self help group, flex/slurry ice, floating jetty,

<sup>26</sup> Excluding the two schemes which were not in operation.



dredging work, etc., owing to no demand from the beneficiaries or not taking up of the work by the Department.

- The funds to meet additional demand in some sub-schemes were arranged through appropriation from sub-schemes where achievement was low.

Audit observations on upgradation projects and construction of fishing harbours, non-plan Diesel VAT subsidy and three plan schemes related to marine fisheries are discussed as under:

## 2.16 Infrastructure Projects

The Department has five fisheries harbours including three Fisheries Terminal Divisions<sup>27</sup> (FTD) at Mangrol, Veraval and Porbandar and two Fishing Ports at Jakhau and Dholai. The Department implemented infrastructure projects financed by National Fisheries Development Board (NFDB) to upgrade Fish Landing Centres<sup>28</sup> (FLCs) and FTDs besides other infrastructure projects during 2012-17. The observations relating to implementation of these projects are discussed as under:

### 2.16.1 Upgradation of Fish Landing Centre (FLC) and Fisheries Terminal Division (FTD)

Proper arrangement for maintenance of FLCs and FTDs is essential to ensure operational efficiency and hygiene. All the FLCs (18 in number) and FTDs (three in number) were constructed prior to 1999. During 2012-17, the Department implemented seven infrastructure projects to upgrade FLCs and FTDs financed by NFDB.

Audit observed (May 2017) that the Department took up (2015) the upgradation work on five out of 18 FLCs and two out of three FTDs. Till March 2017, the Department had incurred expenditure of ₹ 26.16 crore on the works. The status of works are given in **Table 10** below:

**Table 10: Status of works as on 31 March 2017**

Sl. No.	Name of Upgradation Work	Administrative Approval date	Work order date	Stipulated date of completion of work	Tender cost (₹ in crore)	Expenditure incurred (₹ in crore)	Status of work done (in per cent)	
1	FTD, Veraval	03.08.2015	12.02.2016	11.08.2017	13.98	9.86	80	
2	FTD, Porbandar	03.08.2015	22.02.2016	21.01.2017	10.73	9.04	80	
3	FLC, Salaya	17.11.2015	30.08.2016	31.07.2017	12.04	4.32	50	
4	FLC, Sachana	16.11.2015					60	
5	FLC, Navi Bandar	29.12.2015	07.04.2016	06.03.2017	5.37	2.94	45	
6	FLC, Miyani	29.12.2015					65	
7	FLC, Mangrolbara		Work not taken up					

(Source: Information furnished by the Department)

<sup>27</sup> Fisheries Terminal Division is a location where big trawlers unload the fish catch and includes facilities for berthing, storage of fish, auction hall and diesel pumping stations.

<sup>28</sup> Fish Landing Centre is a place where fish catch is unloaded or brought to the shore by the fishermen on small boats.

Audit observed (May 2017) that though the NFDB had released first installment of financial assistance for the above works in March 2012/ January 2013, the Department gave administrative approval for all the works only in 2015. The delay in grant of approval for the works was due to time taken for conducting survey, data collection, preparation of tender papers and shortage of technical staff. Further, the execution of work was also slow in case of four works (Sl. No. 3 to 6) whereas one work (Sl. No. 7) was not taken up, the reasons for which were not available on record.

The Department stated (September 2017) that there was no policy/ mechanism to maintain FLCs/ FTDs. It was further stated that works in coastal area required data collection and many surveys to be carried out for identifying suitable location, which took time. Further, due to shortage of technical staff, more time was required for review of such reports. The fact, however, remains that delay in execution of projects financed by NFDB deprived the fishermen and fishing community of better facilities at the FLCs/ FTDs.

### **2.16.2 Construction of Fishing Harbours**

The fishing harbours at Veraval, Mangrol and Porbandar were established prior to 1988. As on March 2017, these harbours provided berthing for 1,530 boats out of the total 10,048 mechanised boats registered at these harbours *i.e.*, less than 16 *per cent* of the registered mechanised boats at these harbours. In comparison to Gujarat, the berthing capacity at harbours in the State of Kerala and Puducherry was higher at 113.86 *per cent* and 138.01 *per cent*, respectively of the boats registered at the harbours in the concerned States.

GoG approved (September 2012) development of nine<sup>29</sup> new harbours by the Department at an estimated cost of ₹ 813 crore during the 12<sup>th</sup> Five Year Plan. This was with a view to provide more berthing space for fishing boats and infrastructure facilities for fishermen. Audit reviewed the progress of the implementation of development works and observed that:

- In case of works at Veraval Phase-II, Porbandar Phase-II, Sutrapada, Okha, Madhvad and Bhadreshwar<sup>30</sup>, the Detailed Project Report (DPR) was either under preparation or approved. The approved DPRs were at techno-economic approval stage (March 2017). For works at Mangrol Phase-III, and Navabandar, the tenders have been floated. The Department attributed (June 2017) various reasons for delay in implementation of works *viz.*, obtaining clearances, preparation of pre-feasibility report and DPR and shortage of technical staff.
- At Jafrabad, as per the progress report (April 2017), the construction of jetty and the work of dredging and dumping was completed. The work of providing infrastructure facilities was at tender stage. The target date for

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<sup>29</sup> (i) Sutrapada, (ii) Veraval, (iii) Mangrol, (iv) Nava Bandar, (v) Madhvad, (vi) Porbandar, (vii) Okha, (viii) Jafrabad and (ix) Bhadeli-Jagalala.

<sup>30</sup> Bhadreshwar harbour (tenth project) was selected by Gujarat Coastal Zone Management Authority as part of remediation of environmental damage measure and directed to build fishing harbour for the benefit of fishermen.

completion is April 2018, which is likely to be achieved if the work progresses at the current pace.

- Bhadeli-Jagalala was identified by GoG as one of the sites for development of fishing harbour. However, GMB informed (February 2014) that the location proposed for the harbour falls under Coastal Regulation Zone (CRZ) 1(A) category and as such no construction work could be carried out on the site. However, no suitable alternate location for development of harbour has been finalized (June 2017).

The site visits to the existing FTDs at Porbandar and Veraval indicated congestion in berthing as below.



Photographs showing traffic in berthing of harbour at Porbandar (11 April 2017) and at Veraval (12 April 2017).

The Department, thus, failed to carry out approved infrastructure works for construction of new fishing harbour for the benefit of fishermen and fishing community within the 12<sup>th</sup> FYP period as planned.

## 2.17 Providing Equipment and other Facilities to Fishermen at Fishing Centres

The Department implemented a non plan scheme on Diesel VAT subsidy and plan schemes such as ‘FSH 7 - Providing pre-requisite facilities at various fishing centres’ and ‘FSH 8 - Motorisation/ Mechanisation of fishing boats’. A review of the benefits given to fishermen under the schemes revealed the following:

### 2.17.1 Diesel VAT Subsidy

As part of Fishermen Development Scheme, the Department introduced (October 2012) Diesel Value Added Tax (VAT) subsidy under Non Plan Scheme with an objective to provide direct benefit of reimbursement of VAT in purchase of High Speed Diesel (HSD) to all categories of fishermen having one or more mechanised boats with length less than 20 meters.

The assistance/subsidy provided under the Diesel VAT subsidy scheme was equivalent to the amount of VAT in purchase of HSD used as fuel in the boats for fishing purpose. The quota of HSD eligible for VAT reimbursement was fixed by the GoG. The fishermen were issued diesel cards which were required

to be carried with them at the time of purchasing diesel from the designated diesel pump dealers. The fishermen had to obtain token from the fisheries guard stationed at fishing harbours. Only on production of token, the diesel pump dealers supplied diesel to the fishermen. The diesel so purchased was entered in the diesel card. The fishermen furnished the diesel card to the district offices for claiming the reimbursement of subsidy. After vetting of the claims by the district authorities, the subsidy was paid through direct credit to the fishermen's bank account. The details of subsidy claimed, funds released by GoG for subsidy and actual subsidy given by the Department to the fishermen during 2012-17 are given in **Table 11** below:

**Table 11: Details of Diesel VAT subsidy provided during 2012-17**

(₹ in crore)

Year	Subsidy requirement			Budget Provision	Subsidy given	Shortfall (as on March)
	Shortfall of previous year	Current year requirement	Total			
2012-13	--	37.37	37.37	37.37	37.37	--
2013-14	--	139.20	139.20	90.00	90.00	49.20
2014-15	49.20	164.71	213.91	129.00	128.55	85.36
2015-16	85.36	149.50	234.86	93.66	85.36	149.50
2016-17	149.50	241.00	390.50	80.00	79.94	310.50 <sup>31</sup>
<b>Total</b>				<b>430.03</b>	<b>421.22</b>	

(Source: Diesel subsidy claim records of the Department)

As on 31 March 2017, there was shortfall in receipt of subsidy of ₹ 310.50 crore<sup>31</sup> from GoG by the Department for reimbursement to the eligible fishermen. As can be seen from **Table 11**, the budgetary support provided by GoG for the subsidy was never adequate as compared to its requirement during 2013-17.

During 2012-15, the subsidy was reimbursed in full with part subsidy paid in subsequent years. The subsidy for 2015-16 of ₹ 149.50 crore was proportionately (53.42 per cent<sup>31</sup>) reimbursed to the eligible fishermen as per directions (October 2016) of GoG. This was paid out of ₹ 80 crore received by the Department in 2016-17. The outstanding subsidy of ₹ 310.50 crore involves 20,313 fishermen for two years (partial claim of ₹ 69.50 crore for 2015-16 and full claim of ₹ 241 crore for 2016-17).

Thus, due to inadequate budgetary support from GoG, there was shortfall in reimbursement of subsidy to the fishermen. Consequently, the reimbursement has been delayed which defeated the purpose of giving direct benefit of VAT relief to fishermen.

The Department admitted (September 2017) that due to shortfall in grant from GoG, reimbursement of diesel VAT subsidy claims could not be made in full.

<sup>31</sup> The figures here do not tally with the computation because Audit has adopted the figures as adopted by the Department for its future considerations.

### 2.17.2 Motorisation/ Mechanisation of fishing boats

Centrally sponsored scheme (CSS) for Motorisation/ Mechanisation of fishing boats was operational since 1998-99. Under the scheme, subsidy of 50 per cent of the cost of two stroke Out Board Machines (OBM) fitted in the fishing boat, restricted to a maximum of ₹ 30,000 per OBM, was to be given to the fisherman.

Since two stroke machine was operated with kerosene and four stroke machine could operate on petrol and LPG, with a view to reduce fuel consumption of boats, GoG proposed (April 2012) to GoI to enhance assistance for purchase of four stroke machines to ₹ 60,000. However, the request of the GoG was not accepted by the GoI.

In 2013-14, the Department introduced a new sub-scheme for assistance in purchase of four stroke machine under State plan. This scheme provided for subsidy upto ₹ 60,000 for purchase of a four stroke machine. This scheme was continued till 2015-16. In 2016-17, the GoI increased the subsidy under the CSS scheme to ₹ 60,000. Consequently, GoG merged its State Plan scheme with CSS with total subsidy of ₹ 90,000<sup>32</sup>.

The physical target *vis-à-vis* achievement for the year 2012-17 is given in **Table 12** below:

**Table 12: Physical target *vis-à-vis* achievement in purchase of OBM during 2012-17**

(in numbers)

Year	Two stroke machines		Four stroke machines	
	Target	Achievement	Target	Achievement
2012-13	418	418	141	0
2013-14	100	0	333	21
2014-15	400	400	333	55
2015-16	400	278	333	66
2016-17	Combined target of 100	27	Combined target of 100	90

(Source: Scheme files of the Department)

The Department incurred expenditure of ₹ 5.13 crore on these sub-schemes during 2012-17. Audit observed that the achievement against the target was lower during 2013-16 in case of four stroke machine. In 2013-14, assistance was provided for only 21 machines of four stroke whereas no assistance for two stroke machines was provided due to non-receipt of funds towards subsidy from GoI. Further, the target of 733 machines (400 - two stroke machine and 333 - four stroke machine) for the year 2016-17 was reduced to 100 by GoG on the recommendation of the Department (combined target for both machines) due to higher amount of subsidy involved. Against this, 117 beneficiaries were provided assistance; 27 for two stroke machines and 90 for four stroke machines. This led to less coverage of beneficiaries than the initial target of 733 machines.

<sup>32</sup> GoI: ₹ 60,000 and GoG: ₹ 30,000.

Audit further observed that the Department was of the view (April 2012) that Petrol/ LPG operated four stroke machines only should be promoted as they were eco-friendly and economically more beneficial. The GoG, however, continued to provide assistance for both two stroke (kerosene operated) and four stroke machines (Petrol/ LPG operated) since the beneficiaries were reluctant to switch over from two stroke to four stroke machines.

The Department stated (June 2017) that due to efforts of field offices, the assistance provided for purchase of four stroke machines was more than the assistance for two stroke machines in 2016-17. It was further stated (September 2017) that there was no separate scheme implemented for four stroke machines by GoI and hence, assistance was given for both two stroke and four stroke machines.

The reply does not bring out the fact that GoI had given (January 2013) flexibility to GoG to give assistance for the machines as per its local conditions. However, the assistance for four stroke machines gained pace only in 2016-17 *i.e.*, after three years. Further, as the subsidy for both two stroke and four stroke machines was same, it was financially more attractive for the beneficiaries to go for two stroke machines as the overall cost of such machines was less than the four stroke machines. The Department may consider looking into the anomaly in the equal amount of subsidy granted for both two stroke and four stroke machines.

### **2.17.3 Assistance for purchase of Global Positioning System**

Global Positioning System (GPS) helps the fishing boats to reach the fishing grounds by the shortest route and alerts fishermen while approaching International Maritime Boundary Line (IMBL). In the past, the Department had implemented the scheme for providing GPS to boat owners from 2002-03 to 2007-08. From 2008-09 onwards, GoG entrusted the scheme to Gujarat Maritime Board (GMB) under *Sagar Khedut Sarvangi Vikas Yojana*. However, GMB did not implement the scheme. The scheme was again entrusted back to the Department (2014-15). Thus, the scheme was not operational during 2008-09 to 2014-15. The Department reintroduced the scheme in 2015-16 wherein assistance of 50 *per cent* of the purchase cost of the GPS subject to a maximum of ₹ 20,000 was provided to the boat owners.

Audit observed that assistance was given only for 508 GPS (25.40 *per cent*) and 1,685 GPS (84.25 *per cent*) against the target of 2,000 GPS for the years 2015-16 and 2016-17 each. As the Department had empanelled dealers/ distributors for purchase of GPS only in December 2015, the achievement was lower during 2015-16.

The Department stated (June 2017) that opinion of various authorities was to be taken for empanelment, which led to delay in appointment of dealers/distributors. Audit is of the view that the Department should have initiated the process of empanelment well in time considering all the requirements so as to avoid the delay.

## 2.18 Environmental Issues

### 2.18.1 Sustainable Development Goals

India has adopted (September 2015) the Sustainable Development Goals (SDGs) of United Nations which includes a set of 17 Goals to end poverty, fight inequality and injustice and tackle climate change by 2030. The objective of SDG was to produce a set of universally applicable goals that balances the three dimensions of sustainable development *i.e.*, environment, social and economic. One of the objective under Goal 14.4 (Life below water) of SDG was to effectively regulate harvesting and over fishing, unregulated and unreported fishing, destructive fishing practices and implement science based management plans in order to restore fish stocks in the shortest time feasible to levels that can produce maximum sustainable yield as determined by their biological characteristics by the year 2020.

In pursuance to the objective of SDGs, the activities of the Department aimed at regulating fishing and promoting environmental friendly fishing practices. The observations in this regard are discussed as under:

### 2.18.2 Non-issue of notification for regulation of fishing activities

Section 7 of the Gujarat Fisheries Act, 2003 prescribes that the State Government may regulate, restrict or prohibit fishing in any specified area to conserve fish and to regulate fishing on scientific basis and to maintain law and order in the sea and on shore. No specific notification on the subjects/matters referred in Section 7 of the Act has been issued by the GoG (May 2017). Such a regulation would be in consonance with the objectives under Goal 14.4 (Life below water) of SDG to effectively regulate the fishing activities.

The Department stated (September 2017) that the process of issuing requisite notification had been initiated. The reply is not convincing. Since the enactment of the Act in 2003, notification had not been issued. Further, the reply did not give reasons for non-issue of the notification though mandated by the Act.

### 2.18.3 Non-adoption of uniform fishing ban period

GoI constituted (May 2013) a Technical Committee<sup>33</sup> (TC) to review the duration of the fishing ban period and to suggest further measures to strengthen the conservation and management aspects. The TC recommended (September 2014) to impose fishing ban in the west coast from 1 June to 31 July (61 days) every year. GoI accepted (March 2015) the recommendation. The GoG had also consented to the above recommendation in March 2015. Audit observed that GoG was imposing fishing ban for 67 days starting from June 10 to August 15 every year even till 2017 and had not revised the fishing ban

<sup>33</sup> Technical Committee consisted of nine members *viz.*, representative of Department of Animal Husbandry, Dairying and Fisheries, GoI; Central Marine Fisheries Research Institute (two representatives) Kochi; Director of Fisheries Government of Tamil Nadu and Government of Karnataka; Bay of Bengal Programme – Inter-Governmental Organisation, Chennai; Central Institute of Fisheries Technology; National Fish Workers Forum; and Fisheries Survey of India.

period for 61 days from June 1. Thus, the GoG was not complying with the GoI directions for adoption of uniform fishing ban period.

The Department stated (September 2017) that amendment in the Gujarat Fisheries Act, 2003 and the Gujarat Fisheries Rules, 2003 in line with the GoI direction would be carried out.

#### 2.18.4 Non-fixation of Maximum Limit of Fishing Boats in Fisheries Terminal Divisions

Section 7 of the Gujarat Fisheries Act, 2003 prescribes that the State Government may by notification regulate, restrict or prohibit the number of fishing vessels to be used for fishing.

There are three Fisheries Terminal Divisions under the jurisdiction of the Department at Veraval, Mangrol and Porbandar. The berthing capacity and registered boats at these harbours are given in the **Table 13** below:

**Table 13: Berthing capacity and registered boats at the FTDs of the State as on March 2017**

Sl. No.	Name of harbor	Berthing capacity	Registered boats
1	Veraval	750	4,082
2	Mangrol	380	1,804
3	Porbandar	400	4,162
<b>Total</b>		<b>1,530</b>	<b>10,048</b>

(Source: Details furnished by the Department)

Audit observed that the number of registered boats at the FTDs were more than six times of their berthing capacity. As the limit of number of fishing boats registered at a particular FTD had not been fixed, there is a possibility of over fishing by boats operating from these FTDs. Further, due to over-crowding at above FTDs, the possibility of increase in average turn-out time<sup>34</sup> (24 hours) cannot be ruled out.

The Department stated (September 2017) that as per the GoI direction (June 2017), they have discontinued registration and issue of licence to new fishing boats having more than 10 HP engine.

The reply does not address the immediate concern regarding existing registered boats which were far more than the existing berthing capacity and possibility of over fishing and over-crowding at the FTDs.

#### 2.18.5 Use of 40 mm code end net

Gujarat Fisheries Rules, 2003, prohibits any person to operate any other dimension fishing net except square mesh net of minimum 40 mm size at the code end portion for fishing of demersal fish<sup>35</sup>. With a view to maintain marine fish resources, the Department implemented (January 2010) RKVY scheme of Financial Assistance to Fishing Boat owner for distributing 40 mm code end net with a view to curb mortality of small fishes.

<sup>34</sup> Time taken to unload catch of fish and starting of next trip.

<sup>35</sup> Fish available at the bottom of the sea or lake.



The scheme provided for supply of 40 mm code end nets. The Department issued work order (January 2012) for supply of 7,000 nets of 40 mm code end worth ₹ 1.63 crore and the project was completed in 2012-13. Audit examination indicated that the Department distributed 4,333 nets against the target of 7,000 nets and thereby achieved 61.90 per cent of the target. The balance 2,667 nets purchased under the scheme during 2012-13 were lying undistributed (May 2017). The reason for lower achievement was due to poor response from the fishermen. Records made available to audit did not indicate whether the Department made any efforts to promote use of 40 mm code end nets except for distribution of nets as mentioned above.

Audit further observed that despite the use of 40 mm code end nets being made mandatory, the Department had no mechanism to monitor the actual usage of such nets. During the site visit (April 2017) at Fisheries Terminal Division (FTD) at Porbandar and Veraval conducted jointly with the representatives of the Department, Audit observed that 15 mm to 30 mm code end nets were also being used as against minimum 40 mm code end nets.



Photographs showing usage of fishing nets less than 40 mm code end at the harbour at Porbandar (11 April 2017) and at Veraval (12 April 2017)

The Department, therefore, could not enforce the usage of minimum 40 mm code end fishing nets as required under Gujarat Fisheries Rules, 2003.

The Department stated (September 2017) that the requisite notification to regulate and control the use of 40 mm code end nets is being issued. Further, to enforce the provisions of Gujarat Fisheries Act, 2003, a proposal to set up enforcement wing is being sent to GoG.

## 2.19 Manpower

### 2.19.1 Shortage of manpower

The staff position of the Department is given in **Table 14** below:

**Table 14: Staff position as on 01 May 2017**

Sl. No.	Class	Sanctioned posts	Men-in position	Vacant posts	Percentage of vacancy
1	I	41	7	32	78.05
2	II	57	20	34	59.65
3	III	673	289	366	54.38
4	IV	155	110	41	26.45
<b>Total</b>		<b>926</b>	<b>426</b>	<b>473</b>	<b>51.08</b>

(Source: Information furnished by the Department)

Audit observed that, as on 1 May 2017, more than 50 *per cent* of the posts were vacant. Of the total sanctioned posts, 529 were technical posts and 397 were non-technical. There was vacancy of 306 in technical posts (58 *per cent* of total technical posts). Likewise, 167 non-technical posts were vacant (42 *per cent* of total non-technical posts). These vacancies arose during the years 1998 to 2017. It was noticed in the test-checked offices that the same incumbent was holding multiple charge(s) of one or more posts in same or different office(s).

The Department accepted (May 2017) that constraints faced in completing the works in time were due to shortage of manpower. Audit is of the view that vacancy in posts especially in technical cadres over a long period of time adversely affects successful implementation of various programmes intended for improvement of fisheries activities.

The Department stated (September 2017) that they have recruited more than 67 officials in various cadres since 2016 and are proactively pushing for the recruitment through direct selection in various cadres.

## **2.20 Internal Control, Monitoring and Evaluation Mechanism**

### **2.20.1 Internal Control and Internal Audit**

An effective internal control mechanism provides reasonable assurance of economical, efficient and effective operations and adequately safeguards resources against loss.

As per circular dated 20 August 1987 of General Administrative Department, GoG, the internal audit branch of all the departments of GoG have to prepare annual inspection plan and follow it strictly to run the administrative system smoothly and ensure proper implementation of schemes and programmes.

The Internal Audit is conducted by separate audit branch of the Department. There were 28 (during 2012-15) and 35 (during 2015-17) regional/ subordinate offices of the Department which were subject to internal audit. Only five officials are on roll as on 31 March 2017 against the sanctioned strength of seven in the internal audit branch. The audit branch prepared annual inspection plan for all the five years during 2012-17. However, the pendency in conducting internal audit ranged from Nil to 46 *per cent* during 2012-17. Further, available records indicated that no action was taken on the Inspection Reports prepared by the internal audit branch. The timely inspections of each subordinate office would help detect the gaps in the implementation of various schemes/ programmes. The Department also need to take requisite action and follow-up on regular basis on the observations contained in the Inspection Reports proposed by the internal audit branch.

Deficiencies in internal control were noticed in implementation of RKVY/ GoG schemes on Fish Culture Cage, compliance with lease policy conditions, delays in implementation of infrastructure projects, usage of code end nets and utilisation of funds.

The Department stated (September 2017) that all the units would be audited on rotation basis.

### **2.20.2 Monitoring and Evaluation**

Monitoring is vital to track the progress of any scheme, programmes or a process with a view to detect deviations from the set path and take corrective action for achievement of desired objectives.

During 2012-17, the Commissioner of Fisheries reviewed the implementation of various schemes regularly on quarterly basis with the head of the concerned divisions. The regional/subordinate offices submit the progress reports on the implementation of the schemes on monthly basis.

Though the schemes were reviewed regularly, audit observed that the monitoring was deficient as indicative from inadequate assessment of spawns requirement for fingerlings production, under-utilisation of ponds, funds reported as utilised without actual utilisation, delay in empanelment of equipment suppliers, and delays in implementation of infrastructure projects as discussed in the preceding paragraphs.

Audit observed that the Department did not conduct any evaluation of the impact of the schemes/projects implemented to assess whether the desired objectives of the schemes/projects were achieved or not. It was also observed that the Department did not factor in the specific needs of the inland, marine and brackish water fisheries schemes. In absence of any evaluation, the success or effectiveness of the schemes/projects implemented and development of fisheries could not be assessed. Further, the socio-economic impact of the schemes on the fishermen community was not ascertainable.

The Department stated (September 2017) that the schemes/projects were monitored by the Head of the Department from time to time. Further, the mechanism to evaluate the action taken on the directions given in the review meetings has been put in place. It was further stated that General Administrative Department, GoG undertakes evaluation of the schemes. However, no such evaluation of schemes was carried out during 2012-17.

## **2.21 Conclusion**

**During 2012-17, the marine fish production of the State constituted about 20 per cent of the all India marine fish production while inland fish production of the State was little more than one and half per cent of the all India inland fish production. Audit observed that the Department prepared a Five Year Plan (2012-17) with cumulative targets to be achieved at the end of the Plan period. However, year-wise targets and matching financial outlays for various components were not included in the Plan. The annual operational budget/estimates did not flow from the Five Year Plan. Besides, variations in the original budget estimates and revised budget estimates were noticed indicating unrealistic projections and instances of funds lying unutilised due to delay or ineffective implementation of the schemes.**

In its schemes for development of Inland fisheries, the Department was not able to meet the requirement of fish seeds, the reservoirs/ ponds were under-utilised and there were delays in schemes on fish culture cage. The Department did not have a marketing policy critical to its success but it was assisting the small vendors, processing plant owners, *etc.* through sub-schemes like insulated box, assistance to women self-help groups, upgradation of processing plants and machinery, *etc.* For the purpose of development of Marine fisheries, the implementation of infrastructure projects of upgradation and development of new harbours were affected due to delays in taking up the projects thereby depriving the fishing sector the benefits of better facilities. The delays in transferring the subsidy due to inadequate funds defeated the purpose of providing direct benefit of Diesel VAT subsidy to the fishermen .

Though mandated to regulate, restrict and conserve fisheries, the Department did not use or amend the provisions of Fisheries Act, 2003 to adopt uniform fishing ban period and fixing the limit for berthing of fishing boats in Fisheries Terminal Divisions. The Department also did not make adequate efforts to promote use of 40 mm code end nets for fishing. The Department did not conduct any impact evaluation of the schemes factoring in the specific needs of the inland, marine and brackish water fish farmers. Therefore, the Department could not assess whether the desired objectives of fisheries development were achieved.

## 2.22 Recommendations

- *The Department may prepare budget estimates based on the realistic projections and implement the schemes in a planned manner to avoid idling of funds.*
- *The Department may identify the scheme activities that are lagging behind, analyse the reasons for the gap and its impact to appropriately decide to either discontinue or rationalise them based on specific needs of the fishermen.*
- *Mapping of suitable saline land and allotment of mapped land may be expedited for development of brackish water aquaculture.*
- *Timelines may be laid down and adhered to for infrastructure projects to enable the fishing sector avail its benefits.*
- *The Department may frame marketing policy for enhancing the opportunity to the fishermen to sell their products.*