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2008-09

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FISHERY SURVEY OF INDIA

Govt. of India

Ministry of Agriculture

(Deptt. of Animal Husbandry, Dairying & Fisheries)

Mumbai

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INTRODUCTION

The Fishery Survey of India (FSI), the nodal agency of the Govt.of India responsible for the survey and assessment of the marine fishery resources of the Indian Exclusive Economic Zone (EEZ), continued its effort to accomplish the tasks assigned during the year under report. Besides, implementation of the regular survey projects at different Base offices, FSI has also carried out experimental fishing on diversified fishing methods, mesh selectivity and comparative studies to understand efficiency of gears.

This Annual Report presents the highlights of the ongoing survey activities, accomplished during the year 2008-09. While accomplishing these tasks, the Institute has also taken care of conducting regional workshops, open-houses, exhibitions etc. for the benefit of the fishermen, the fishing industry and the end-users as a part of the extension activities in all the maritime states for the development of the marine fisheries of the respective regions. The Institute has also been acting as an interface between the Ministry of Agricultue and the State fisheries departments in collecting and compiling the marine fish landing statistics. The Institute also continued to impart post- institutional in-vessel training to the students sponsored by the CIFNET, Kochi on board its survey vessels. Training was also provided to fishermen in deep-sea fishing especially on monofilament long lining for tuna enabling them to undertake resource specific deep-sea fishing.

Fishery Survey of India celebrated its Diamond Jubilee on 7-8 February 2009 at Mumbai. Shri Sharad Pawar Hon'ble Union Minister of Agriculture, Consumer Affairs, Food and Public Distribution inaugurated the Diamond Jubilee Celebrations on 7 February 2009. As a part of Diamond Jubilee, Fishery Survey of India conducted a National Conference on *Marine fisheries and fishing harbour infrastructure* on 8 February 2009

During the year under report, 13 vessels of the Institute collectively achieved 2098 days at sea expending a sampling effort of 3275 hours and 272193 hooks. The incidental fish catch during the survey was 169.68 tonnes, realising a revenue of Rs. 21.98 lakhs as the sale proceeds. The Budget grant of the Institute for the year 2008-09 was Rs. 42.69 crores and the expenditure was Rs. 37.36 crores.

2. OPERATIONAL BASES AND SURVEY VESSELS

The survey fleet of the Institute comprised of 13 vessels. Placement of these survey vessels and their major specifications are furnished below:

| Base/Vessel | OAL (m) | GRT | ВНР | Type of vessel | |
|--------------------|---------|--------|------|--------------------------------|--|
| | | | | | |
| Mumbai | | | | | |
| Matsya Nireekshani | 40.5 | 329.26 | 2030 | Stern trawler | |
| Matsya Vrushti | 37.5 | 465.00 | 1100 | Monofilament longliner | |
| Mormugao | | | | | |
| Yellow Fin | 36.0 | 290.00 | 800 | Tuna longliner | |
| Matsya Vishwa | 36.5 | 327.18 | 825 | Stern trawler | |
| Sagarika | 28.8 | 189.00 | 650 | Stern trawler | |
| Kochi | | | | | |
| Matsya Varshini | 36.5 | 268.80 | 1160 | Purse-seiner-cum-stern trawler | |
| Matsya Sugundhi | 31.5 | 245.80 | 650 | Longliner-cum-squid jigger | |
| Lavanika | 24.0 | 151.00 | 500 | Stern trawler | |
| Chennai | | | | | |
| Samudrika | 28.8 | 151.00 | 650 | Stern trawler | |
| Matsya Drushti | 37.5 | 465.00 | 1100 | Monofilament longliner | |
| Visakhapatnam | | | | | |
| Matsya Shikari | 39.5 | 352.00 | 1740 | Stern trawler | |
| Matsya Darshini | 36.5 | 268.80 | 1160 | Purse-seiner-cum-stern trawler | |
| Port Blair | | | | | |
| Blue Marlin | 36.0 | 290.00 | 800 | Tuna longliner | |
| | | | | 6 - | |

3. IMPLEMENTATION OF FISHERY RESOURCES SURVEY PROJECTS

3.1 MARINE FISHERY RESOURCES SURVEY, ASSESSMENT AND MONITORING PROJECTS

A. Demersal resources survey and monitoring projects

| Coast / Vessel | | | |
|---|--|---------------------------|--|
| West Coast | | | |
| Matsya Nireekshani | Demersal fishery resources survey, assessment and monitoring of fish stocks along North Maharashtra-Gujarat coast. | 18° N - 23° N 30-500 m | |
| Matsya Vishwa | Matsya Vishwa Demersal fishery resources survey, assessment and monitoring of fish stocks along SouthMaharashtra, Goa,Karnataka and North Kerala coast. | | |
| Sagarika | Demersal fishery resources survey, assessment and monitoring of fish stocks along South Maharashtra, Goa, Karnataka and North Kerala coast. | 11° N- 18° N 20-300 m | |
| Matsya Varshini | Matsya Varshini Demersal fishery resources survey, assessment and monitoring along South-west Coast, Wadge Bank and Gulf of Mannar | | |
| Lavanika | Lavanika Demersal fishery resources survey, assessment and monitoring of fish stocks and coastal shrimp resources along South-west Coast. | | |
| East coast | | | |
| Samudrika | Demersal fishery resources survey, assessment and monitoring along South-east Coast | 10° N -16° N 30-300 m | |
| Matsya Shikari | Matsya Shikari Demersal fishery resources survey, assessment and monitoring along the Upper east Coast | | |
| B. Pelagic resou | rces survey projects | | |
| Matsya Darshini Survey of coastal pelagic resources by mid-water trawling along the Upper east Coast (Andhra Pradesh, Orissa and West Bengal coast) | | 15° N - 21° N 30-200 m | |

C. Oceanic tuna resources survey projects

| Vessel | Survey project | Latitude | | | |
|---|--|--------------|--|--|--|
| Yellow Fin | Survey of oceanic tuna and allied resources using longline in Indian EEZ along North-west Coast (including Lakshadweep waters) | | | | |
| Blue Marlin | Tuna resources survey in the Indian EEZ around Andaman and Nicobar Islands | 5° N -15° N | | | |
| Matsya Vrushti | Tuna resources survey using monofilament longline in the Arabian sea including Lakshadweep waters | 4° N - 23° N | | | |
| Matsya Drushti | Matsya Drushti Tuna resources survey by monofilament longline in the Bay of Bengal | | | | |
| D. Experimental | projects. | | | | |
| Matsya Sugundhi | Trap and handline fishing for perches along South -west Coast including Quilon Bank, Wadge Bank and Gulf of Mannar | 7° N - 11° N | | | |
| Blue Marlin | Bottomset vertical longline survey in Indian EEZ around Andaman and Nicobar Islands | 5° N - 15° N | | | |
| E. Special Drive programme on Exploratory longline Survey | | | | | |
| Blue Marlin Matsya Vrushti | 1 | | | | |

3.2 Physical targets and achievements during 2008-09

Physical targets in terms of voyages, days at sea, days fished and fishing effort with corresponding achivements of the survey vessels are furnished below:

| | | | | Targ | get | | 1 | Achieve | ment |
|---|--|----------------|-------------------|------------------|---|-------------|-------------------|-------------------|---|
| Base | Vessel | | Days at sea | Fishing days | Sampling effort | | Days at sea | Fishing days | Sampling effort |
| Mumbai | M.Vrushti M.Nireekshani | 11 11 | 220 220 | 158 176 | 110600 ⁶ 825 ¹ | 10 6 | 150 90 | 78 50 | 43493 ⁶ 221 ¹ |
| Mormugao | Yellow Fin M.Vishwa Sagarika | 11 2 10 | 220 40 200 | 150 32 160 | 93750 ⁶ 150 ¹ 750 ¹ | 9 2 5 | 152 37 79 | 88 28 63 | 44625 ⁶ 122 ¹ 271 ¹ |
| Kochi | M.Varshini M.Sugundhi Lavanika | 11 11 22 | 220 220 220 | 176 176 | 825 ¹ 2688 ³ 3072 ⁴ 1120 ⁵ 825 ¹ | 12 12 | 208 223 148 | 163 167 112 | 642 ¹ 288 ³ - ⁴ 1420 ⁵ 494 ¹ |
| Chennai | M.Drushti Samudrika | 10 9 | 200 180 | 140 144 | 98000 ⁶ 675 ¹ | 12 9 | 209 172 | 122 140 | 72355 ⁶ 588 ¹ |
| Visakhapatnam | M.Shikari M.Darshini | 11 11 | 220 220 | 176 176 | 825 ¹ 462 ² | 12 10 | 213 177 | 152 130 | 596 ¹ 341 ² |
| Port Blair | Blue Marlin | 11 | 220 | 160 | 71250 ⁶ 28800 ⁷ | 12 | 240 | 183 | 91470 ⁶ 20250 ⁷ |
| Total 1 = Bottom trawling(hrs) 2 = Mid-water trawling(hrs) 3 = Handline fishing (hrs) 4 = Squid jigging (Machine hrs.) 5 = Trap fishing (No.of traps) 6 = Tuna longlining (No of hooks) | | 141 | 2600 | 2000 | 4875 ¹ 462 ² 2688 ³ 3072 ⁴ 1120 ⁵ 373600 ⁶ | 126 | 2098 | 1476 | 2934 ¹ 341 ² 288 ³ -4 1420 ⁵ 251943 ⁶ |
| | 6 = Tuna longlining (No of hooks) 7 = Bottom-set longlining | | - | | 288007 | 1 | | | 20250^7 |

3.3 Scientist participation in survey cruises

For collection of fishery resources data, Scientists of the Institute regularly participate in survey cruises of the vessels. Details of the scientist participation during the year are as follows.

| Vessels | Scientist participant | No.of cruises | Days at sea |
|--------------------|--|---------------|----------------|
| | | | |
| Yellow Fin | Shri D. K. Gulati, Sr. Fisheries Scientist | 1 | 20 |
| 1000011 000 | Shri N. Unnikrishnan, Jr. Fisheries Scientist | 2 | 37 |
| | Shri Y. Tharumar, Sr. Scientific Assistant | 2 | 35 |
| | Shri M. R. Kokane, Jr. Fishing Gear Technologist | 1 | 08 |
| | Shri A. E. Ayoob, Jr. Fishing Gear Technologist | 1 | 19 |
| | Shri Puran Singh, Scientific Assistant | 2 | 33 |
| Matsya Vrushti | Shri A. K. Malik, Jr. Fisheries Scientist | 1 | 18 |
| , | Shri S. G. Patwari, Jr. Fisheries Scientist | 1 | 19 |
| | Shri A. E. Ayoob, Jr. Fishing Gear Technologist | 3 | 38 |
| | Shri Devanand E.Uikey, Scientific Assistant | 2 | 27 |
| | Shri Sijo. P. Varghese, Scientific Assistant | 1 | 17 |
| | Shri Kiran S. Mali, Research Fellow | 1 | 09 |
| | Shri Sachin Khairnar, Research Fellow | 1 | 19 |
| | Shri Vaibhav Mhatre, Research Fellow | 1 | 19 |
| Matsya Nireekshani | Shri A. K. Malik, Jr. Fisheries Scientist | 2 | 14 |
| - | Shri S. G. Patawari, Jr. Fisheries Scientist | 1 | 15 |
| | Shri A. S. Kadam, Jr. Fisheries Scientist | 1 | 15 |
| | Shri Kiran Desai, Data Enumerator | 2 | 33 |
| | Shri Sachin Khairnar, Research Fellow | 1 | 15 |
| Matsya Vishwa | Shri Y. Tharumar, Sr. Scientific Assistant | 2 | 25 |
| · | Shri M. R. Kokane, Jr. Fishing Gear Technologist | 1 | 09 |
| Sagarika | Shri Y. Tharumar, Sr. Scientific Assistant | 2 | 16 |
| | Shri Raju Nagpure, Scientific Assistant | 2 | 40 |
| | Shri Puran Singh, Scientific Assistant | 1 | 20 |
| Matsya Varshini | Shri J. E. Prabhakar Raj, Fisheries Scientist | 4 | 41 |
| | Shri A. John Chembian, Sr. Scientific Assistant | 4 | 77 |
| | Shri Jacob Thomas, Sr. Scientific Assistant | 2 | 35 |
| | Shri.C. Babu, Scientific Assistant | 1 | 20 |
| | Dr S. Ramchandran, Scientific Assistant | 2 | 35 |

Fishery Survey of India

| Vessel | Scientist participant | No.of | Days |
|-----------------|--|--------------------------------------|--|
| | | cruises | at sea |
| Matsya Sugundhi | Shri Jacob Thomas, Sr. Scientific Assistant Shri.C. Babu, Scientific Assistant Dr S. Ramchandran, Scientific Assistant Shri C. Speakurger, Scientific Assistant | 2 3 1 | 40 54 20 |
| | Shri C. Sreekumar, Scientific Assistant | 1 | 08 |
| Matsya Drushti | Shri P. S. Parasuraman, Sr. Fisheries Scientist Shri S. A. Rajakumar, Fisheries Scientist Shri G. Nagarajan, Jr. Fisheries Scientist Shri P. Tamilarasan, Jr. Fisheries Scientist Dr J. Jaychandra Dhas, Jr. Fisheries Scientist Shri G. V. A. Prasad, Sr. Scientific Assistant Shri H. D. Pradeep, Scientific Assistant | 1 1 2 2 2 2 2 2 | 20 07 30 25 37 40 40 |
| Samudrika | Shri G. Nagarajan, Jr. Fisheries Scientist Shri P. Tamilarasan, Jr. Fisheries Scientist Dr J. Jaychandra Dhas, Jr. Fisheries Scientist Shri G. V. A. Prasad, Sr. Scientific Assistant Shri H. D. Pradeep, Scientific Assistant | 1 2 2 2 2 2 | 20 39 32 40 37 |
| Matsya Shikari | Dr S. K. Naik, Sr. Fisheries Scientist Shri K. S. N. Reddy, Fishing Gear Technologist Shri N. Jagannadh, Jr. Fisheries Scientist Dr Ansuman Das, Jr. Fisheries Scientist Shri Abhay Raj, Scientific Assistant Shri Purna C. Padhy, Sr. Research Fellow Shri P. Suresh Kumar, Research Fellow Shri V. Uma Mahesh, Data Enumerator | 1 2 2 1 2 1 2 2 | 10 29 38 17 21 15 34 32 |
| Matsya Darshini | Dr Ansuman Das, Jr. Fisheries Scientist Shri Abhay Raj, Scientific Assistant Shri Purna C. Padhy, Sr. Research Fellow Shri P. Suresh Kumar, Research Fellow Shri V.Uma Mahesh, Data Enumerator | 1 1 1 4 1 | 11 20 12 62 20 |
| Blue Marlin | Shri K. Govindraj, Fisheries Scientist Dr M. K. Sinha, Jr. Fisheries Scientist Shri A. B. Kar, Jr. Fishing Gear Technologist Shri Sujit Kumar Pattnayak, Scientific Assistant | 5 1 3 3 | 100 20 60 60 |

4. FLEET MAINTENANCE

4.1 Mandatory maintenance

During the year under report, the Fishery Survey of India, had operated a fleet of 13 survey vessels based at Mumbai, Mormugao, Kochi, Chennai, Visakhapatnam and Port Blair, for the survey and assessment of the marine fishery resources of the Indian EEZ. These survey vessels are maintained sea-worthy by carrying out dry dock repairs at various public sector shipyards and also through routine maintenance programme at respective Bases. The vessels undergone drydocking repairs during the year are detailed below:

| Vessel and Shipyard | Date of | Date of | | eriod of |
|---------------------------------------|------------|------------|--------------------------|---|
| | Docking | Undocking | Afloat repairs | Inspection |
| Sagarika M/s Cochin Shipyard Ltd. | 10.06.2008 | 03.07.2008 | 04.07.2008 to 27.07.2008 | 28.07.2008 to 04.08.2008 |
| Samudrika M/s Cochin Shipyard Ltd. | 4.10.2008 | 22.11.2008 | 23.11.2008 to 07.01.2009 | 29.12.2008 Re-inspected on 09.01.2009 |

4.2 Acquisition of new vessels

Fishery Survey of India had re-floated the Global Tender for acquisition of two Mid-water Trawlers. In response, only two bids were received, out of which only one bid was technically qualified. The matter was referred to the Ministry and it has been informed that single tender cannot be accepted and tender has to be refloated.

5. INFRASTRUCTURAL FACILITIES

5.1 Facility Centre of FSI Headquarters

The construction of Facility Centre for FSI (HQ's) at Sassoon Dock, Colaba, has been completed up to third floor level and remaining works could not be completed due to pending PIL at Hon'ble High Court, Mumbai.

5.2 Construction of office/Workshop Buildings at Bases

The construction work of residential quarters, one Block each of Type-III and Type-IV at Port Blair at an estimated cost of Rs.1.69 crore is in progress.

5.3 Marine workshop and slipway facilities at MED, Kochi

- 1. Fabrication of Slipway Cradle: As per the recommendations of the Expert Committee, the tenders were floated and three quotations were received. The work order was placed with the lowest quoted party, M/s. Kerala Electrical & Allied Engineering Co. Ltd., Kochi, at a cost of Rs. 49,70,969/-.
- 2. Providing of Sub-station for Independent Electrical Connection: The Work has been completed during 2008, by the CPWD, Kochi.

6. TRAINING

6.1. Training received

The following officers and staff attended the training programmes during the year 2008-09.

| Name | Designation | Subject / Institute / Period |
|--|---|--|
| Shri P. Sivaraj Shri P. T. Rao | Zonal Director Assistant | Workshop on RTI Act, 2005 and Role of Information Officers held at National Archive of India Record Centre, Puducherry. 24-25 April 2008 |
| Shri T. V. S. Prasad | Service Engineer (I &C) | Course on Engineering and Management in Fisheries and Aquaculture. IIT, Kharagpur, 29 April 2008 - 9 May 2008 |
| Shri A. Anrose Shri D. K. Gulati Shri N. Thirupalu Shri Edward Kerketta Shri J. G. Ohal Shri P. K. Pahuja | Zonal Director Sr. Fisheries Scientist Assistant Accounts Officer Office Superintendent Accountant Accountant | Training on Administrative and Financial Functions of DDO, Retirement benefit etc. at RTC Mumbai. 25-27 August 2008 |
| Shri A. Anrose Shri Amit Kumar Saha Shri K. N. Swamy Smt.K. K. Ambika | Zonal Director Jr. Clerk Cashier Sr. Clerk | Training on New pension scheme CDDO for DDO at PAO, Chennai. 13 September 2008 |
| Shri M. R. Kokane | Jr. Fishing Gear Technologist | Training in Fishery Technology at the UN University-Iceland 15 September 2008 - 14 March 2009 |
| Shri A. John Chembian | Sr. Scientific Assistant | Training on Acoustic Technique for fish and plankton biomass estimation conducted by Centre for Marine Living Resources and Ecology (CMLRE), Kochi. 22-23 September 2008 |
| Shri L. K. Rao Shri N. Thirupalu Ms. Chandrakala Shri Vinod G. Naik | Sr. Administrative Officer Assistant Accounts Officer Office Superintendent Jr. Clerk | Features of 6th Central Pay Commisssion and Pay Fixation 16-17 October 2008 |

Fishery Survey of India

| Name | Designation | Subject / Institute / Period |
|--|--|---|
| Shri K. S. N. Reddy Dr Ansuman Das | Fishing Gear Technologist Jr. Fisheries Scientist | Training on Grading of Tuna for Export at MPEDA, Regional Center Visakhapatnam. 20-22 October 2008 |
| Shri A. Anrose Shri K. P. Raghunath Shri K. M. Abdul Nazir Shri N. Varadhan Shri P. Papa Rao Shri Sanatan Das | Zonal Director Office Superintendent Sr. Clerk Stenographer Gr.II Sr. Clerk Accountant | Training on Pay fixation on revised pay Rules, 2008 and Revised Pension Rule at RTC, Mumbai. 18 – 19 November 2008 |
| Shri S. K. Dwivedi | Sr. Scientific Assistant | Training on Fisheries Co-Management at CIFE, Mumbai 12-21 November 2008 |
| Shri B. L. Anjana | Jr. Hindi Translator | Computer training in Hindi at NIC, Bangalore. 1-5 December 2008 |
| Shri Ashok S. Kadam | Jr. Fisheries Scientist | Training on Aquatic Environmental Management at CIFE, Mumbai 23 February - 1 March 2009 |
| Shri L. K. Rao | Sr. Administrative Officer | Training on Special Modular programme on Contract Labour conducted by Institute of Public Administration at Capital Hotel, Bangalore 19-21 March 2009 |

6.2.Training imparted

6.2.1.Training to Fishermen

Fishery Survey of India imparted training to the fishermen sponsored by Directors of Fisheries, Kerala and Karnataka States. Mormugao Base of FSI conducted training for six fishemmen in tuna longline fishing onboard the vessel *Yellow Fin* during October - December 2008.

Kerala Government sponsored thirty four fishermen to Mumbai Base for practical training in the operation of monofilament longline gear and other equipment onboard *Matsya Vrushti*.

Five fishermen sponsored by the Govt. of Kerala undergone training on board the vessel *Matsya Drushti* during August 2008 and March 2009. They were trained in operation of monofilament tuna longline gear as well as navigational and fish finding equipment.

6.2.2 Training to the Students/Officials

Mumbai(HQ's)

The Fishery Survey of India, Mumbai (HQ's) organised one day training programme to the M.Sc. (Zoology) students of the NES, Science College, Nanded, Maharashtra, on 11 October 2008. A total of thirteen students and two faculty members participated in the training programme.

The FSI, Mumbai (HQ's) organised a two-day training programme to the B.F.Sc. students of the College of Fishery Science, Nagpur, on 8 – 9 April 2009. A total of ninteen students and three faculty memberss participated in the training programme.

Kochi Base

Five Assistant Directors (New recruitees) of MPEDA were trained on various fishing methods on 8 August 2008

Twenty Junior Technical Officers of MPEDA were trained in various aspects of fisheries during 8-9 September 2008 at FSI, Mumbai (HQ's.)

6.3 Onboard training to CIFNET trainees

As per the mandate on Human Resources Development, the Institute continued to provide on-the-job-training to CIFNET trainees. The Base-wise details of onboard training imparted are given below:

| Base | No. of trainees | | | | | | |
|---------------|------------------------------|---------------------------|------------------------------------|------------------------|--|--|--|
| | At the beginning of the year | Appointed during the year | Completed training during the year | At the end of the year | | | |
| Mumbai | 7 | 3 | 7 | 3 | | | |
| Mormugao | 4 | 1 | 2 | 3 | | | |
| Kochi | 3 | 4 | - | 7 | | | |
| Chennai | 5 | 2 | - | 7 | | | |
| Visakhapatnam | 3 | 3 | 2 | 4 | | | |
| Port Blair | 1 | 2 | 1 | 2 | | | |
| Total | 23 | 15 | 12 | 26 | | | |

7. PUBLICATIONS

The Institute had been effectively disseminating the resources survey findings to the industry and other end-users through various publications like Bulletins, Charts, Special Publications, Scientific Papers etc. During the year, following publications were released:

Meena News

Meena News-Vol. XXIVI No.1(January-March 2009)

Magazines

Matsya Kiran (Hindi) published by Mumbai (HQ's.) Matsya Dhwani (Hindi) published by Kochi Base

Survey Programme

Fishery Resources Survey, Assessment & Research Programme 2008 - 09.

Reports

Annual Report 2007-2008 (December 2008) Project Report on Tuna Tagging

Profile

FSI Profile (February 2009)

Bulletins

Bulletin No.29: Depredation in the longline fishery of the Indian waters.

Bulletin No.30: Introduction of monofilament longline technology for harvesting oceanic tuna and allied resources in the Indian EEZ.

Resources Information Series - 22 issues

Four issues each from Mormugao, Kochi, Cochin, Chennai, Visakhapatnam and Port Blair Bases, two issues from Mumbai Base were published in English, Hindi and respective local languages.

Extension Series:

Extension Series 2: Regional workshops and open houses (February 2009)

Souvenir: FSI-Diamond Jubilee 1946-2006 (February 2009)

Leaflets on: (i) Polynemid Fishery (ii) Tuna Fishery (iii) Mackerel Fishery (iv) Catfish Fishery (v) Carangid Fishery

Stickers on : (i) Yellowfin Tuna (Thunnus albacares), (ii) Bigeye Tuna (Thunnus obesus),

(iii) Seven Finger Threadfin (*Polynemus heptadactylus*), (iv) Deep sea lobster (*Puerulus sewelli*), (v) Indian Mackerel (*Rastrelliger kanagurta*),

(vi) Indo-Pacific King Mackerel (Scomberomorus guttatus)

Papers presented / published by scientists

- Somvanshi, V. S., Varghese, S., Vinodkumar, M, Sajeevan, M. K. and Sijo P. Varghese, 2008. Impact of environmental and climatic changes on the marine fishery of Indian EEZ. Paper presented at the 8th Indian Fisheries Forum Kolkatta on 22-25 November 2008. Inland Fisheries Society of India, Barrackpore.
- Somvanshi, V. S., Sijo P. Varghese and S. Varghese, 2008. Current status of assessment of oceanic tuna stocks in the Indian ocean, *In*: (Joseph, J., Boopendranath, M. R., Sankar, T.V., Jeeva, J. C. and Kumar, R., Eds.,) *Harvest and Post Harvest Technology for Tuna* Society of Fisheries Technologists (India), Cochin: 36-52
- Anrose, A., 2008. Marine fishery resources of A & N Islands and modification of the existing gear for better catch rate. Paper presented at the regional workshop organized by Port Blair Base of FSI at Nilambur, N&M Andaman on 29 June 2008
- Sinha, M. K., 2008. Exploitation of perch resources by adopting BSVLL. *Ibid*.
- Sinha, M. K., 2008. Safety at sea and Code of Conduct for Responsible Fisheries. *Ibid*
- Anrose, A., M. K. Sinha & A. B. Kar, 2008. Oceanic tuna Resources potential in Andaman & Nicobar waters. Paper presented at the Brain Storming Session on *Development of Island Fisheries* at CARI, Port Blair.
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8. RESEARCH ACTIVITIES

8. National and International Research Projects

Fishery Survey of India is participating jointly with other National Institutes in the implementation of several Research & Development projects relevant to marine fisheries.

The following projects have been implemented during the year.

8.1 OCEANSAT -II PROGRAMME

Project title: Locating Tuna Habitat Through Satellite Remote Sensing

funded by Space Application Centre(SAC), Ahmedabad.

Objective: The objective of the project is to understand the spatio-temporal

aggregation of tuna to elucidate the relationships between tuna forage, physioloy, feeding behaviour, environmental properties and catchability

Study area: Indian EEZ

Period: Four years (April 2008 to March 2012).

Progress of work: The catchdata of the four tuna longline vessels of FSI is being entered

in the computer for further analysis and comparison with SST and

chlorophyll data.

8.2 NATIONAL AGRICULTURAL INNOVATION PROJECT(NAIP)

Project title: A value chain on oceanic tuna fisheries in Lakshadweep Sea

Objectives:

- To evolve effective fishing methods and policies for Lakshadweep sea to increase and sustain production of oceanic tunas and related resources by assessing the status and health of the stocks and ecosystems.
- To develop technologies on hygine and improved handling, processing, packaging and high value products; to develop market intelligence on domestic and overseas market.
- To transfer the new fishing and processing technologies and marketing strategies to the stakeholders and empower their efficiency and socio-economic status.
- To ensure seafood safety and health assurance to the consumers

Period: October 2008 to June 2012

Progress of work: Three Research fellows are working under this project and two voyages have been undertaken in the Lakshdweep Sea during the year. The data collected is being processed.

8.3 FSI successfully executed IOTC funded on tagging of tuna in the Andaman and Nicobar waters

The Fishery Survey of India (FSI), had undertaken a small scale tuna tagging programme in Lakshadweep Islands during 2005 as a part of Western Indian Ocean (WIO) tagging activity with the support of Indian Ocean Tuna Commission (IOTC) by tagging and releasing 5000 tunas with a reported recovery of about 6%. Following further discussion between FSI and IOTC it was decided to extend the tagging activity to the Eastern Indian Ocean (EIO) with the development of a small scale tuna tagging programme in Andaman Islands. The programme was implemented during January to August 2008. This programme was under taken by FSI independently based on the experience and expertise gained from the first project in Lakshadweep. In the absence of Pole and Line boats in Andamans, FSI had to import this technology from Lakshadweep by chartering two Pole and Line boats alongwith crew to Andaman. The tagging cruises were conducted from two locations, viz Burmanellah in the South Andaman Islands and from Neil Island while bait fishing was conducted from Chidiyatapu, Comeo and Havelock Islands. Under this programme, 1332 tunas were tagged and released using pole and line and troll line gears. So far, four recaptures reported from the Andamans by gill netters operating from Junglighat, near Port Blair. Besides the tagging activity, the FSI had also taken the opportunity to provide short term training to the local fishermen of Andamans in pole and line fishing technology for catching tunas and bait fish collection which is a pre-requisite for undertaking this fishing technology, and processing of tunas to prepare a dried and smoked product called *masmeen* practiced in Lakshadweep.

9. ADMINISTRATION AND FINANCE

Dr V. S. Somvanshi, Director General, continued as Head of the Institute during the year.

9.1 Sanctioned posts

The category-wise number of sanctioned posts are furnished below:

| | G. | No. of Posts | | | | |
|-------|----------------|--------------|-------|-------|--|--|
| Group | Category | Headquarters | Bases | Total | | |
| | | | | | | |
| A | Scientific | 07 | 26 | 33 | | |
| | Technical | 05 | 14 | 19 | | |
| | Administrative | 01 | - | 01 | | |
| В | Scientific | 04 | 18 | 22 | | |
| | Technical | 05 | 15 | 20 | | |
| | Administrative | 06 | 05 | 11 | | |
| C | Scientific | 02 | 11 | 13 | | |
| | Technical | 06 | 127 | 133 | | |
| | Administrative | 34 | 84 | 118 | | |
| D | Technical | - | 63 | 63 | | |
| | Administrative | 11 | 49 | 60 | | |
| | Floating Staff | | | | | |
| В | Technical | - | 68 | 68 | | |
| С | Technical | - | 214 | 214 | | |
| | TOTAL | 81 | 694 | 775 | | |

9.2 Officers in position

Name and designation of the officers of the Institute as on 31/03/2009 are given below:

Headquarters, Mumbai

Director General Dr V. S. Somvanshi
Deputy Director General (Fy.) Shri K. Gopalakrishnan
Director (Eng.) Shri T. E. Venkatachalam
Senior Fisheries Scientist Shri S. M. Patil

System Analyst Shri N. V. Ramana Murthy
Fisheries Scientist Dr (Mrs.) S. Varghese
Statistician Shri Chalapati Rao Pittala

Senior Administrative Officer Shri L. K. Rao

Programmer Shri Chittajallu Bhaskar
Junior Fisheries Scientist Shri M. Vinod Kumar
Junior Fisheries Scientist Shri Ashok Kadam
Assistant Accounts Officer Shri N. Thirupalu

Mumbai Base

Senior Fisheries Scientist

Mechanical Marine Engineer

Fisheries Scientist

Junior Fisheries Scientist

Shri A. K. Malik

Junior Fisheries Scientist

Shri A. K. Malik

Shri S. G. Patwari

Mormugao Base

Zonal Director Dr M. E. John
Senior Fisheries Scientist Dr L. Ramlingam
Senior Fisheries Scientist Dr A. K. Bhargava
Service Engineer (Mech.) Shri Dhananjaya Rao
Junior Fisheries Scientist Shri N. Unnikrishnan

Kochi Base

Zonal Director

Shri B. C. Varghese
Senior Fisheries Scientist

Shri D. M. Ali
Senior Fisheries Scientist

Dr P. Paul Pandian
Fisheries Scientist

Shri J. E. Prabhakar Raj
Mechanical Marine Engineer

Shri M. K. Farejiya
Service Engineer (Mech.)

Shri A. Kuppusamy
Service Engineer (Mech.)

Shri O. T. Manoj Kumar

Fishery Survey of India

Chennai Base

Zonal Director Shri P. Sivaraj Senior Fisheries Scientist Shri P. S. Parasuraman Mechanical Marine Engineer Shri M. Shyamasundar Fisheries Scientist Shri S. A. Rajkumar Service Engineer (I & C) Shri T. V. S. Prasad Shri G. Nagarajan Junior Fisheries Scientist Junior Fisheries Scientist Shri P. Tamilrasan Junior Fisheries Scientist Dr J. Jayachandra Dhas

Visakhapatnam Base

Zonal Director Shri Premchand
Senior Fisheries Scientist Dr S. K. Naik
Fishing Gear Technologist Shri K. S. N. Reddy
Service Engineer (Mech.) Shri D. Bhami Reddy
Junior Fisheries Scientist Shri N. Jagannadh
Junior Fisheries Scientist Dr Ansuman Das

Port Blair Base

Zonal Director Shri A. Anrose
Fisheries Scientist Shri K. Govindaraj
Service Engineer (Mech.) Shri Dharmvir Singh
Junior Fisheries Scientist Shri M. K. Sinha

9.3 Budget and Accounts

The details of the Budget Grant and Expenditure of the Institute during the year 2008-09

(Rs. 'in lakhs)

| Particulars | Budget Grant | Actual Expenditure | |
|----------------|--------------|--------------------|--|
| REVENUE (PLAN) | | | |
| Sub-head | | | |
| Salaries | 926.76 | 770.46 | |
| Wages | 135.00 | 135.26 | |
| O.T.A | 0.80 | 0.24 | |
| M.T | 26.00 | 10.90 | |
| D.T.E | 58.60 | 37.65 | |
| F.T.E | 12.00 | 00.34 | |
| O.E | 92.50 | 61.04 | |
| R.R.T | 78.34 | 72.44 | |
| Publication | 7.50 | 4.80 | |
| O.A.E | 10.00 | 8.77 | |
| S & M | 1315.00 | 1200.61 | |
| M.W | 430.00 | 423.43 | |
| O.C | 150.00 | 77.18 | |
| M & E | 250.00 | 219.45 | |
| Sub-Total (A) | 3492.50 | 3022.57 | |
| CAPITAL (PLAN) | | | |
| Sub-head | | | |
| Major work | 0.35 | 0.16 | |
| Sub-Total (B) | 0.35 | 0.16 | |
| Total (A+B) | 3492.85 | 3022.73 | |

OFFSHORE FISHERIES (NON - PLAN)

| Particulars | Budget Grant | Actual Expenditure |
|---------------------------------|--------------|--------------------|
| Sub-head | | |
| Salaries | 600.00 | 603.34 |
| Wages | 9.90 | 9.32 |
| O.T.A | 3.10 | 1.78 |
| M.T | 23.40 | 13.39 |
| D.T.E | 20.00 | 9.21 |
| O.E | 57.00 | 41.65 |
| R.R.T | 3.00 | 2.22 |
| Publication | 0.90 | - |
| B.C.C.T | 5.00 | 0.07 |
| S & M | 5.00 | 2.41 |
| M.W | 5.00 | 0.83 |
| G.I.A | 0.10 | - |
| O.C | 2.90 | 0.97 |
| M & E | 31.70 | 19.88 |
| Sub-Total | 767.00 | 705.07 |
| O.A.E (Departmental Canteen) | 9.50 | 8.66 |
| Total | 776.50 | 713.73 |

9.4 Appointments

The following officers and staff were appointed during the year:

| Name | Designation | Base/HQ's | Date |
|--------------------|---|---------------|------------|
| Shri Shankar Kubal | Jr. Deckhand Service Engineer (Mech.) Mechanic Welder Stenographer Gr. III | Mumbai | 06.06.2008 |
| Shri Manoj Kumar | | Kochi | 18.08.2008 |
| Shri Ravi Kumar | | Kochi | 05.02.2009 |
| Shri Rajesh Kumar | | Kochi | 05.03.2009 |
| Shri Subhrajit Das | | Mumbai (HQ's) | 26.03.2009 |

9.5 Promotions

The following promotions were made during the year:

| Name | Designation | Base / HQ's | |
|-------------------------|---------------------------|--------------------------|---------------|
| | From | То | |
| Shri S. K. Jaiswal | Service Engineer (Marine) | Mech.Marine Engineer | Mumbai |
| Shri T. A. Sajeev | Chief Engineer Gr. II | Chief Engineer Gr. I | Visakhapatnam |
| Shri D. E. Uikey | Scientific Assistant | Sr. Scientific Assistant | Mumbai |
| Smt P. Gouri | Sr. Clerk | Sr. Storekeeper | Kochi |
| Shri L. K. Madhu | Bosun (C) | Mate Gr. I | Mormugao |
| Shri T. L. Muralidharan | Sr. Storekeeper | Office superintendent | Mumbai (HQ's) |

9.6 Transfers

The following transfers were made during the year:

| Name | Designation | Base / HQ's | | |
|--------------------------|-----------------------------|----------------|----------------|--|
| | | From | То | |
| Shri Ramana Murthy. N. V | System Analyst | Mumbai | Mumbai (HQ's) | |
| Shri Salim Babu K. K | Skipper | Mumbai | Kochi | |
| Shri G. C. Anil Kumar | Chief Engineer Gr. II | Mormugao | Visakhapatnam | |
| Shri T. A. Sajeev | Chief Engineer Gr. II | Chennai | Visakhapatnam | |
| Shri A. Lawrence | Chief Engineer Gr. II | Kochi | Chennai | |
| Shri Manoj Kumar | Chief Engineer Gr. I | Mumbai | Mormugao | |
| Shri J. G. Ohol | Accountant | Mumbai | Mumbai (HQ's) | |
| Shri P. K. Pahuja | Accountant | Mumbai | Mormugao | |
| Shri Y. N. Nayak | Accountant | Port Blair | Mormugao | |
| Shri G. H. Paradkar | Accountant | Mormugao | Mumbai | |
| Shri P. K. Shukla | Accountant | Mormugao | Mumbai | |
| Shri R. Gopakumaran Nair | Sr. Clerk | Kochi | Mumbai (HQ's) | |
| Shri B. L. Anjana | Jr. Hindi Translator | Port Blair | Mormugao | |
| Shri S. Subramanian | Marine Electrician | Port Blair | Chennai | |
| Shri C. Venugopal | Mechanical Supervisor (Sr.) | Kochi | Port Blair | |
| Shri. G. Elangovan | Mechanical Supervisor (Sr.) | Port Blair | Chennai | |
| Shri V. Muthukumar | Marine Electrician | Chennai | Port Blair | |
| Shri M. Radhakrishnan | Sr. Deckhand-cum-cook | Mumbai | Mormugao | |
| Shri P. V. Latheesh | Sr. Clerk | Mumbai (HQ's) | Kochi | |
| Shri K. R. K Pillai | Sr. Deckhand | Mumbai | Mormugao | |
| Shri Girish Kumar K. | Bosun (C) | Mumbai | Mormugao | |

9.7 Retirement

The following officers / staff retired from service during the year on superannuation / voluntarily:

| Name | Designation | Base/HQs | Date | Superannuation /Voluntary |
|-------------------------|----------------------------|---------------|------------|------------------------------|
| Shri G. K. Avhad | Sr. Fisheries Scientist | Mumbai | 30.04.2008 | Superannuation |
| Shri A. K. Debnath | Assistant | Port Blair | 30.04.2008 | Superannuation |
| Shri V. G. Rajan | Sr. Clerk | Port Blair | 30.04.2008 | Superannuation |
| Shri R. Selvaraj | Artist | Mumbai (HQ's) | 30.04.2008 | Superannuation |
| Shri L. G. Parmar | Daftry | Mumbai (HQ's) | 30.04.2008 | Superannuation |
| Shri V. Shivaji | Sr. Fisheries Scientist | Kochi | 31.05.2008 | Superannuation |
| Shri K. G.Gopi | Chief Engineer Gr. I | Kochi | 31.05.2008 | Superannuation |
| Shri K. V. Vanaja | Peon | Kochi | 31.05.2008 | Superannuation |
| Shri A. Cleetus | Sr. Deckhand | Kochi | 31.05.2008 | Superannuation |
| Shri G. Joseph | Accountant | Mormugao | 31.05.2008 | Superannuation |
| Shri V. Jayaprakash | Chief Engineer Gr. I | Mormugao | 31.05.2008 | Superannuation |
| Shri Y. N. Dave | Machinist | Porbandar | 31.05.2008 | Superannuation |
| Shri P. K. Bhaskaran | Sr. Administrative Officer | Mumbai(HQ's) | 30.06.2008 | Superannuation |
| Shri V. V. Rao | Office Superintendent | Visakhapatnam | 30.06.2008 | Superannuation |
| Shri M. Krishna Rao | Sr. Deckhand | Visakhapatnam | 30.06.2008 | Superannuation |
| Shri Harishchander | Mech. Marine Engineer | Mumbai | 30.06.2008 | Superannuation |
| Shri G. S. Prasad | Daftry | Chennai | 30.06.2008 | Superannuation |
| Shri K. N. V. Nair | Zonal Director | Mumbai | 31.07.2008 | Superannuation |
| Shri T. M. Villavarayer | Watchman | Chennai | 31.08.2008 | Superannuation |
| Shri Y. Raja Rao | Sr. Deckhand | Mormugao | 31.08.2008 | Superannuation |
| Shri P. J. Joseph | Fisheries Scientist | Mumbai(HQ's) | 16.09.2008 | Voluntary |
| Shri T. P. Lingam | Milling Machine Operator | Chennai | 30.09.2008 | Superannuation |
| Shri B. K. Poddar | Bosun (C) | Visakhapatnam | 02.10.2008 | Voluntary |
| Shri K.V. Moni | Chief Engineer Gr. II | Chennai | 30.10.2008 | Superannuation |
| Shri A. B. Ghosh | Sr. Deckhand | Visakhapatnam | 31.10.2008 | Superannuation |
| Shri J. M. Karkera | Chief Engineer (Gr. I) | Mumbai | 01.11.2008 | Voluntary |
| Shri B. S. Deshmukh | Driver Gr. I | Mumbai (HQ's) | 01.11.2008 | Voluntary |
| Shri P. Kamalaksha | Operator (Copier) | Mumbai (HQ's) | 01.11.2008 | Voluntary |
| Shri S. K. Biswas | Sr. Deckhand | Port Blair | 31.12.2008 | Superannuation |
| Shri K. C. Sebastian | Mechanic | Kochi | 31.12.2008 | Superannuation |
| Shri C. C. Shetty | Bosun (C) | Mormugao | 01.01.2009 | Voluntary |
| Shri M. M. Biswas | Jr. Clerk | Port Blair | 31.01.2009 | Superannuation |
| Shri N. A. Tandel | Sr. Deckhand | Mumbai | 31.01.2009 | Superannuation |
| Shri S. K. Biswas | Sr. Deckhand | Visakhapatnam | 31.01.2009 | Superannuation |
| Shri M. Appa Rao | Net Mender | Port Blair | 28.02.2009 | Superannuation |
| | | | | |

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| Name | Designation | Base/HQs | Date | Superannuation /Voluntary |
|---|-----------------------------------|---|--|---|
| Shri D. H. Khan Shri S. S. Chidambaram Shri V. Murali Rao Shri K. R. Kannappan Shri Jayaprasad Upadyaya Shri R. K. Patnaik Ms Chandrakala | Sr. Deckhand Assistant Foreman | Mumbai Chennai Chennai Kochi Kochi Visakhapatnam Mormugao | 01.03.2009 31.03.2009 31.03.2009 31.03.2009 31.03.2009 31.03.2009 31.03.2009 | Voluntary Superannuation Superannuation Superannuation Superannuation Superannuation Superannuation |

9.8 Obituary

Shri C. Venugopal, Mechanical Supervisor of Kochi Base expired on 30.07.2008 Shri K. M. George, Reserve Clerk of Kochi Base expired on 18.10.2008

10. IMPORTANT EVENTS AT BASES AND HEADQUARTERS

10.1. MEETINGS

10.1.2. Annual Review Meeting

Annual meeting to Review Operational and Scientific Activities (ROSA) of the FSI Base offices for 2008-09 and to finalise the fishery resources survey, assessment and research programme for 2009-10 was held at Mumbai during 28-29 April 2009

10.1.3. Consultative Committee Meetings

Mumbai

Consultative Group Meeting of the Mumbai Zonal Base of Fishery Survey of India was conducted on 7 April 2008 at FSI Mumbai Base office. Total ninteen members attended the meeting.

Mormugao

XIII Consultative Group Meeting of Mormugao Zonal Base of Fishery Survey of India was conducted on 22 April 2008 under the Chairmanship of Shri Veerappa Gowda, Director of Fisheries, Government of Karnataka.

Kochi

XVI Consultative Group Meeting of the Kochi Zonal Base of Fishery Survey of India was conducted on 17 June 2008 under the Chairmanship of Shri K. B. Shaji, Additional Director of Fisheries, Government of Kerala.

Chennai

XVIII Consultative Group Meeting of the Chennai Zonal Base of Fishery Survey of India was conducted on 23 April 2008 under the Chairmanship of Shri Shambhu Kallolikar, I.A.S, Commissioner of Fisheries, Government of Tamil Nadu

Port Blair

Consultative group meeting of Port Blair Zonal Base of Fishery Survey of India was held on 3 April 2008 under the Chairmanship of Dr V. Krishnamurthy, Director of Fisheries, Andaman and Nicobar Administration.

10.2 PARTICIPATION IN WORKSHOPS / SEMINARS / SYMPOSIUM AND WORKING PARTIES

10.2.1 Participation in National Forums

Dr M. E. John, Zonal Director of Mormugao Base and Shri B. C. Varghese, Zonal Director of Kochi Base attended the meeting of National Agriculture Innovation Project (NAIP) Consortium Implementation Committe at CMFRI, Kochi on 24 April 2008.

Dr Ansuman Das, Jr. Fisheries Scientist of Visakhapatnam Base attended a meeting on *Implementation of Uniform Ban* at office of the Joint Director of Fisheries, Govt. of Andhra Pradesh, Visakhapatnam on 25 April 2008.

Dr M. E. John, Zonal Director of Mormugao Base and Shri B. C. Varghese, Zonal Director of Kochi Base of FSI participated in the workshop on Fisheries Master plan for Kerala held at CMFRI, Kochi during 25-26 April 2008.

Shri A. Anrose, Zonal Director of Port Blair Base attended the meeting on Finalization of Draft Action Plan for Development of Fisheries in Andaman and Nicobar Islands on 7 May 2008.

Shri D. M. Ali, Sr. Fisheries Scientist and Shri J. E. Prabhakar Raj, Fisheries Scientist of Kochi Base participated in the meeting on Exploiting the deep sea squid resources at MPEDA, Kochi on 3 June 2008.

Shri A. Anrose, Zonal Director of Port Blair Base attended a stakeholders meeting on shrimp aquaculture in A & N Islands organized by Directorate of Fisheries, A & N Administration, Port Blair on 27 June 2008 .

Dr M. E. John, Zonal Director of Mormugao Base attended the meeting of National Agriculture Innovation Project (NAIP) at CMFRI, Kochi on 12-13 August 2008.

Shri D. Bhami Reddy, Service Engineer (Mech.) of Visakhapatnam Base attended a workshop on *Impact of TBT Ban on the Shipping Industry* at National Ship Design and Research Centre, Visakhapatnam on 12 September 2008.

Shri N. Jagannadh, Jr. Fisheries Scientist of Visakhapatnam Base attended the National Official Language Seminar on *Marine Fisheries of Andhra Pradesh* at CMFRI, Visakhapatnam on 29 September 2008.

Shri P. Tamilarasan, Jr. Fisheries Scientist (Gr.I) of Chennai Base attended the meeting at North Chennai Fishermen Villagers Iyikkia Panchayat Hall, Jeevarathrams Maligai, Chennai on 29 September 2008 conducted by MPEDA regarding subsidy schemes on Tuna fisheries and revised standard/hygiene conditions for registration of fishing vessel and freezer vessels under MPEDA Act, 1972.

Dr S. K. Naik, Sr. Fisheries Scientist and Shri K. S. N. Reddy, Fishing Gear Technologist of Visakhapatnam Base attended the workshop on *Strategies for conservation of endangered / threatened marine macro fauna along the North Andhra Coast with special focus on sea turtles, dolphins, whale sharks etc.*, held at Green Park Hotel, Visakhapatnam organized by Andhra Pradesh Forest Department, Visakhapatnam on 24 November 2008.

Shri A. Anrose, Zonal Director along with Shri A. B. Kar, Jr. Fishing Gear Technologist of Port Blair Base participated in the International Symposium on Marine Ecosystem Challenges & Opportunities held at CMFRI, Kochi during 9-12 February 2009.

Shri Dharmvir Singh, Service Engineer (Mech.) of Port Blair Base attended a meeting on Tuna Fishery in A & N Island - Finalization of action plan convened by the Chief Secretary, A & N Administration held at the Secretariat, Port Blair on 10 March 2009.

The Fishery Survey of India, Participated in the Technical workshop organised by the College of Fishery Science, Udgir, Distt-Latur, on 14 March 2009. Four Technical papers were presented by the Scientists of Fishery Survey of India.

Shri B. C. Varghese, Zonal Director of Kochi Base attended a meeting of National Agricultural Innovative Project scheme on the utilization strategy for oceanic squids in Arabian sea: a value chain approach held at CMFRI, Kochi on 27 March 2009

10.2.2 Participation in International Forums

Dr M. E. John, Zonal Director of Goa Base participated in the FAO workshop on Assessment and Management of the offshore resources in South and South East Asia held at Bangkok, Thailand on 17-18 June 2008.

Shri N. Jagannadh, Jr. Fisheries Scientist of Visakhapatnam Base participated in the BIMSTEC Fisheries meeting held at Bangkok, Thailand along with Shri D.Chaudhary, Director (Fy), Dept. of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, New Delhi during 20 – 22 January 2009.

10.3 VISITORS / DELEGATIONS

Mumbai Base

Shri Tarun Shridhar, IAS, Joint Secretary, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Govt. of India visited the new office building site at Sassoon dock and the vessel *Matsya Nireekshani* on 22 August 2008.

Mormugao Base

A team of ten Fishermen and a staff member of Office of the Assistant Commissioner of Fisheries, Thane (Palghar), Mumbai, Maharashtra visited the Base on 15 October 2008.

Twenty nine Students and two faculty members of the College of Fisheries, Shirgaon, Ratnagiri visited the Base on 14 December 2008

Kochi Base

Ms Lara Mattison, a student of Brown's University, Fiji, visited the Base on 28 August 2008. She was briefed about FSI activities, oceanic resources and stock assessment method.

A team of twenty B.F.Sc Students of College of Fisheries, Panangad visited the Base on 26 December 2008.

Shri Tarun Shridhar, IAS, Joint Secretary (Fisheries), Dept. of Animal Husbandry, Dairying & Fisheries, Ministry of Agriculture, New Delhi visited Base office on 15 Jannuary 2009.

Shri Gokul Ram, IAS, Secretary, Dept. of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, New Delhi visited the Base along with Shri Tarun Shridhar, Joint Secretary on 16 Jannuary 2009.

Visakhapatnam Base

Shri G. S. Mehta, General Manager, NABARD, Mumbai and Shri P. C. Dash, Manager, NABARD, Andhra Pradesh Regional Office, Hyderabad visited the Base on 17 June 2008 for discussion on the project *Study of Tuna Long Liners -Preparation of Model Project*.

Shri K. Ravi, Superintendent, Anthropologist (Cultural), Anthropological Survey of India, Nagpur visited the Base on 22 August 2008 for gathering information on various types of gears and different methods of fishing.

Shri Narayan Pradhan, Executive Quality Assurance, Residensy Foods and Beverages Ltd., Visakhapatnam visited the Base on 4 March 2009 for gathering information on Tuna fisheries and its quality control.

Shri Vinay P. Padate, Ph.D. student of Dept. of Marine Sciences, Goa University, Goa visited on 21 August 2008 for collection of references from office library.

Twenty one cadets and two faculties from Sailors Maritime Academy, Vijayanagaram, Andhra Pradesh visited survey vessels on 7 November 2008 as a part of their course curriculum.

Seven students from Ananda Chandra College, Jalpaiguri, West Bengal visited on 17 November 2008 for statistical information on marine fisheries.

Sixty five students of third year B.Sc. from Dr.V.S.Krishna College, Visakhapatnam visited on 19 November 2008 to know about marine fishing operations and techniques on marine fisheries resources.

Sixty eight students of Final Year B.Sc., from Andhra Loyala College, Vijayawada visited on 9 January 2009 as a part of their educational tour.

Twenty two students of final year M.Sc. Zoology and two faculty members from Rajahmundry Women's Degree College visited on 3 February 2009 to gather information on marine fisheries and allied subjects.

Dr Maria R. Menzes, Scientists, NIO, Goa visited on 26 February 2009 along with two research fellows to collect fin of yellowfin tuna, skipjack tuna, frigate tuna, bigeye tuna etc., for their research work.

Shri Nooka Raju, Bosun and Shri P. Lakshmana Rao, AIF, SIFT, Kakinada, Andhra Pradesh visited on 17 March 2009 alongwith forty two fishermen trainees on a study tour.

Port Blair Base

Dr A. R. T. Arasu, Principal Scientist, Head of Fish Culture Division, Central Institute of Brackishwater Aquaculture (CIBA), Chennai visited the Base and the vessel M.F.V.Blue Marlin on 7 April 2008.

Dr N.G. K. Pillai, Director, Central Marine Fisheries Research Institute(CMFRI), Dr E. V. Radhakrishnan, Head, Crustacean Division, CMFRI, Dr P. T. Mathew, Head, Fish Processing Division, Central Institute of Fisheries Technology (CIFT) and Dr Praveen Puthran, Sr. Scientist, CIFT, visited on 22 June 2008.

Shri M. K. R. Nair, Fisheries Development Commissioner, Ministry of Agriculture, New Delhi visited on 28 June 2008.

Dr (Mrs) Maria R. Menezes, Scientist F, Biological Oceanography, National Institute of Oceanography (NIO), Goa alongwith two Research Scholars visited on 22 July 2008 and collected the information on the landings of various species of tunas.

Fishery Survey of India

Dr Y. G. K. Murty, President, Association of Indian Fishery Industries, Visakhapatnam visited on 30 August 2008 and collected information on tuna resources availability and also information on the small-scale tuna tagging programme in the Andaman waters.

Shri Venu, Lecturer, Department of Marine Biology, Pondicherry University visited this office and vessel on 11 August 2008 and collected the information on tuna longline operational details and resources availability in Andaman Sea.

Shri C. Nasaran Bernard and Shri Rajasekhar from Kanyakumari district, Tamil Nadu visited on 10 September 2008 and collected information on availability of fishery resources in A & N Islands

Ms Uma Nathan, Dy. Manager, Feed-back Ventures, Gurgaon, Haryana visited on 25 November 2008 and collected information on fishery resources of A & N Islands.

Shri D. S. Rawat, Dy. Director, Official Language, Dept. of Animal Husbandry, Dairying & Fisheries, Ministry of Agriculture visited the Base during 15-18 January 2009 in connection with the visit of the Honourable Parliamentary Committee from 4-9 February 2009.

Shri Arijit Majumdar, Principal Consultant and Shri T. K. Basak, Executive Consultant, Creative Research Group, Kolkata visited on 6 January 2009 and collected information on the resource potential of A & N Islands.

Ms Rawla, Joint Secretary, Dept. of Animal Husbandry, Dairying & Fisheries, Ministry of Agriculture, New Delhi visited on 3 February 2009 in connection with the visit of second Sub-Committee of the Standing Committee of Parliament on Official language.

10.4 PARTICIPATION IN IITF, 2008

The Fishery Survey of India, participated in the India International Trade Fair, 2008, organised by the India Trade Promotion Organisation (ITPO) New Delhi at the Pragati Maidan, during 14 – 27 November 2008 and displayed various charts pertaining to the survey activities, models of survey fleet, fishing models.

10.5 RADIO/AKASHVANI TALK

- 1. Fishermen Co-operative Societies Shri Ashok S. Kadam, Jr. Fisheries Scientist.
- 2. Application of Remote Sensing Technology in Fisheries Shri S.M. Patil, Sr. Fisheries Scientist.
- 3. Use of Modern Electronic Equipment in the Fisheries Shri S.M. Patil, Sr. Fisheries Scientist.
- 4. Conversion on Shrimp Trawlers to Monofilament Tuna Longliners: A Successful scenario in the Indian waters Shri Ashok S. Kadam, Jr. Fisheries Scientist.

10.6 DOORDARSHAN TALK SHOW

Indian Fishing Industry & Exports - Dr V.S. Somvanshi, Director General

10.7 PARTICIPATION IN THE EXHIBITIONS/AQUA SHOW

10.7.1 Quest - 20, Mega Science Exhibition

The Fishery Survey of India, participated in Quest-20, a Mega Science Exhibition, organised by the Royal College of Arts, Science & Commerce, Mira Road, Dist-Thane from 18-20 December 2008 for the benefit of Students, Teachers & Researchers.

10.7.2 Marine Fisheries Exhibition

The Fishery Survey of India, Mumbai, organised a two-day Marine Fisheries Exhibition on 26-27 September 2008 at Shri Shivaji Mahavidyalaya, Barshi, Dist-Solapur.

The Fishery Survey of India, Mumbai, organised a two-day Marine Fisheries Exhibition on 29 – 30 September 2008 at the Chhatrapati Shivaji College, Omerga, Dist-Osmanabad.

The Fishery Survey of India, Mumbai, organised a two-day Marine Fisheries Exhibition, on 12 – 13 March 2009 at Dyandeo Mohekar Mahavidyalaya, Kalamb, Dist-Osmanabad.

The Fishery Survey of India, Mumbai, organised a two-day Marine Fisheries Exhibition on 16-17 March 2009 at the College of Fishery Science, Udgir, Distt-Latur.

10.7.3 Aqua Show

Kochi Base of Fishery Survey of India participated in "AQUASHOW" and set up a Stall for displaying departmental activities and marine acquarium during 1-5 February 2008.

10.8 WORKSHOP/OPEN HOUSE CONDUCTED BY THE INSTITUTE

As a part of the extension activities, Fishery Survey of India continued organizing regional workshops at major marine fish landing centres in maritime States, through the Bases of FSI. During the year under report following workshops were organized.

Mumbai Base

A regional *Workshop, Exhibition and Training on Deep-Sea Fishing* was organized by the Mumbai Base of Fishery Survey of India in association with the Versova Macchimar Nakhawa Mandal, Versova on 21 January 2009 for the benefit of the local fishermen, fishing boat operators and other end-users. Shri H. R. Pawar, IAS, Commissioner of Fisheries, Govt. of Maharashtra inaugurated the workshop and delivered keynote address. Representatives from the fisheries organizations like Central Institute of Fisheries Education (CIFE), Central Marine Fisheries Research Institute (CMFRI), Central Institute of Fisheries Technology (CIFT), Marine Products Export Development Authority (MPEDA) and Space Application Centre (SAC) participated in the workshop. A public awareness campaign/rally was organized involving the local fishermen and school children for creating awareness on sustainable utilization of fishery resources and related issues, such as CCRF, pollution, etc. Seven presentations were made in local language during the technical session.

Mormugao Base

A regional workshop on *Marine Fisheries of Karnataka:Resources and Sustainable Utilization* was onducted on 20 March 2009 at Fishing Harbour, Kasargod, Honnavar, Kranataka. The Workshop was inagurated by Dr (Smt.) Kusum Neelakantan, Chairperson, P. G. Centre Karnataka University, Karwar. The workshop focused on the urgent need to control fishing in the coastal sector, the scope of augmenting production of the oceanic resources and the need for following sustainable fishing practices in accordance with the guidelines of the Code of Conduct for Responsible Fisheries.

Kochi Base

A workshop on *Exploitation of deep sea resources of Gulf of Mannar and Wadge Bank* was organised at Colachel, Tamil Nadu on 5 March 2009. Representatives of MPEDA, NIFPHATT and Dept. of Fisheries, Tamil Nadu presentated papers.

An open house on FSI activities and Marine resources was organised on 6 October 2008 at Marine Engineering Division of FSI at Ernakulam for the benefit of students and public. Students of nine colleges / Institutes participated in the open house.

Chennai Base

A workshop on Marine Fisheries Resources of Tamil Nadu and exhibition were organised on 6 August 2008 at Injambakkam, Kancheepuram Dist, Tamil Nadu in association with the

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Dept. of Fisheries, Tamil Nadu. The workshop was inaugurated by Shri Thilaigovindan, Joint Director of Fisheries, Govt. of Tamil Nadu, Chennai.

A regional workshop on Marine Fishery Resources off Lower East Coast was organized on 19 December 2008 at Jagathapattnam, Pudukottai Dist. Shri G. Ramakrishnan, President, Mechanised Boat Fishermen Association inaugurated the workshop. About hundred fishermen and boat owners attended the workshop.

Two open houses were organized on board *Matsya Drushti* on 5 December 2008 and 9 March 2009 in which a total seven hundred and fifty students along with faculty members visited.

Visakhapatnam Base

A regional workshop on *Marine Fishery Resources of North Coastal Andhra Pradesh* was organized at Pudi Venugopala Swamy Youth Association Hall, Manchineellapeta village, Vajraputtur Mandalam, Srikakulam District, Andhra Pradesh on 26 November 2008.

An Open House was conducted on 24 June 2008. The vessels *Matsya Darshini* and *Matsya Shikari* were kept open for public during the program.

Port Blair Base

Two regional workshops on *Marine Fisheries Resources of Andaman and Nicobar Islands* were organized at Oral Kutcha, N&M Andaman and Havelock, South Andaman on 29 September 2008 and 30 January 2009 respectively. At Oral Kutcha Shri Sheikh Khalil, Pradhan, Gram Panchayat, Nilambur inaugurated the workshop, whereas at Havelock, Shri Ajit Kumar Roy, Pradhan,inaugurated the workshop. On both the occassions, Shri A. Anrose, Zonal Director delivered the keynote address.

Two open houses onboard the vessel *Blue Marlin* were organized on 28 September 2008 at Rangat, Middle Andaman and 1 February 2009 at Campbell bay. The local fishermen, school children and general public visited the vessel.

As a part of extension programme, a *Fishermen Meet* was organized by the Base in association with the Department of Fisheries, Andaman and Nicobar Administration at Nimbutala, N&M Andaman on 27 November 2008. The meet was aimed at creating awareness among the fishermen on the resource potential and the advanced fishing techniques to harvest the fishery resources available in Andaman and Nicobar waters.

To create awareness among the fisher folk regarding the conservation of marine wealth and Code of Conduct for Responsible Fisheries, the Base organized a *Fishermen Rally* at Oral Kutcha, N&M Andaman on 29 June 2008 and Vijaya Nagar, Havelock, South Andaman on 30 January 2009. About one hundred and fifty five fishermen took part in both rallies holding the placards of the slogan written in Hindi on conservation of marine wealth and Code of Conduct for Responsible Fisheries.

10.9 DIAMOND JUBILEE CELEBRATION OF FSI

The Fishery Survey of India under Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, established in August 1946, celebrated its Diamond Jubilee on 7-8 February 2009 at the Yashwantrao Chavan Centre, Mumbai. Shri Sharad Pawar, Hon'ble Union Minister of Agriculture, Consumer Affairs, Food and Public Distribution, inaugurated the Diamond Jubilee Celebrations on 7 February 2009. Shri Chhagan Bhujbal, Hon'ble Deputy Chief Minister, Government of Maharashtra, presided over the function and Smt Annie Shekhar, Hon'ble MLA, Colaba, Shri N. Gokulram, IAS, Secretary to the Government of India and Shri Tarun Shridhar, IAS, Joint Secretary (Fisheries) to the Government of India, Ministry of Agriculture, Department of Animal Husbandry, Dairying & Fisheries were present on the occassion.

Shri Sharad Pawar, Hon'ble Union Minister of Agriculture, categorically stated that Fishery Survey of India, the oldest fishery research organisation of the country was instrumental for catalysing the development of the marine fisheries sector of the country. The Minister applauded and appreciated the officers and staff of the FSI who had put up their untiring efforts for the successful implementation of the survey programme and fulfilling the objectives assigned to the Institute. He further mentioned that the Ministry had already announced a Comprehensive Marine Fishing Policy in the year 2004 which had provisions for expansion of fishing activities for increasing fish production and management and conservation of fish stocks in the Indian EEZ.

Shri N. Gokulram, IAS, Secretary to the Government of India, in his speech, requested the Scientists of the Fishery Survey of India to utilize their knowledge and skill for enhancing marine fish production for food safety for the coming generations. On the occasion, Dr V. S. Somvanshi, Director General, FSI on behalf of officers and staff of FSI, felicitated the Chief Guest and other dignitaries on the dais by presenting memento to each of them.

FSI felicitated employees who completed 30 years of service

Shri N. Gokulram, IAS, Secretary to the Government of India, Ministry of Agriculture, Department of Animal Husbandry, Dairying & Fisheries, felicitated the FSI employees who had completed 30 years of service. The Secretary presented mementoes to all the staff including the retired employees of the Institute. Prizes to the winners of sports and games organized by the FSI for the staff during the Daiamond Jubilee celebration were also given on the occasion.

FSI honoured the Best employees

Evaluating the performance of the employees working in various categories, FSI awarded merit certificates and medals to the Best employees. Shri Sharad Pawar, Hon'ble Union Minister of Agriculture, Consumer Affairs, Food and Public Distribution, presented the certificates and medals to the best employees of the Institute.

Following is the list of Best employees working in various categories in FSI awarded merit certificate and medal.

| Name | Designation | Name | Designation |
|-----------------------|---------------------------|----------------------|------------------------|
| Dr M. E. John | Zonal Director | Shri N.Tirupalu | Asst.Accounts Officer |
| Shri A. Anrose, | Best Officer-in-charge | Smt M. Chandrakala | Office Superintendent |
| Shri P. S. Parsuraman | Sr. Fisheries Scientist | Smt C. J. Chandanani | Assistant |
| Dr A. K. Bhargava | Sr. Fisheries Scientist | Shri G. V. Pillai | Stenographer Gr.II |
| | (Best Support) | Shri Sanatanadas | Accountant |
| Shri S. M. Patil | Sr. Fisheries Scientist | Smt Santha Kuruvilla | Sr. Clerk |
| | (Extension activities) | Shri Rupesh Kumar | Jr. Clerk |
| Dr (Mrs.) S. Varghese | Fisheries Scientist | Shri B. L. Anjana | Jr. Hindi Translator |
| Shri S. A. Rajkumar | Fisheries Scientist | Shri A. S. Chaulkar | Driver |
| Shri N. Unnikrishnan | Jr. Fisheries Scientist | Ms Kavita Naik | Peon` |
| Shri J. Chembian | Sr. Scientific Assistant | Shri G D. Kumar | Refrigeration Mechanic |
| Shri M. K. Farejiya | Mech.Marine Engineer | Shri S. D. Raut | Marine Electrician |
| Shri S. K. Jaiswal | Service Engineer (Mech.) | Shri E. Apparao | Fitter |
| Shri V. P. Sharma | Mech.Supervisor | Shri S. Kamraj | Welder |
| Shri P. C. Rao | Statistician | Shri Neil Mohan Das | Mechanist |
| Shri Bapu Raut | Data Processing Assistant | Shri Rajendra Mistry | Carpenter |
| Shri K. S. N. Reddy | Fishing Gear Technologist | Shri P. M. Patil | Netmender |
| Shri L. Kesava Rao | Sr.Administrative Officer | | |

Staff of Best Performed vessel - Blue Marlin

| Name | Designation | Name | Designation |
|--|--|-------------------------------------|--|
| Shri C. Periasamy Shri K. Anbalagan Shri G. S. Wellington Shri K. I. Joseph Shri K. S. Joesph Paul | Chief Engineer Gr. I Chief Engineer Gr. II Chief Engineer Gr. II | Shri S. K. Biswas Shri A. C. Das | Bosun (c) Sr. Deckhand Sr. Deckhand Sr. Deckhand |

Meenakshi Trophy awarded to the vessel Blue Marlin

The rolling trophy for the best performed vessel for the year was bagged by the tuna longliner *Blue Marlin* of Port Blair Base. Shri A. Anrose, Zonal Director, Port Blair Base, received the trophy from Hon'ble Minister.

As part of the Diamond Jubilee Celebrations, an exhibition was organized by the FSI highlighting the contributions made by FSI to the marine fisheries development during the last six decades.

The Hon'ble Minister, Shri Sharad Pawar, inaugurated the exhibition. Models, photographs and posters of fishing craft and gear, fishery resources, fishing techniques and charts showing guidelines for conservation and management were displayed in the exhibition. Specimens of fresh fish were also displayed for the benefit of the visitors.

National Conference on Marine fisheries and fishing harbour infrastructure

As part of the Diamond Jubilee celebrations, the FSI organized a National Conference on 7-8 February 2009. Shri Tarun Shridhar, IAS, Joint Secretary (Fisheries) to the Government of India, Ministry of Agriculture, Department of Animal Husbandry, Dairying & Fisheries inaugurated the National Conference. Dr Shri Shamlal Goyal, IAS, Secretary, Department of Animal Husbandry, Dairying and Fisheries, Government of Maharashtra was the Guest of Honour. Shri Tarun Shridhar, IAS enlightened the theme of the workshop in his keynote address. The Joint Secretary stated that the FSI should conduct surveys for marine as well as inland fishery resources in India.

On 8 February 2009, Dr (Mrs.) S. Varghese, Fisheries Scientist, Convenor of the National Conference briefed the theme of the workshop and objectives of the workshop to the participants. The conference was conducted in two Technical Sessions followed by a Plenary Session.

In both technical sessions a total of twenty two papers were presented. The plenary session was Chaired by Dr S. N. Dwivedi, Director, Acadamy of Science, Engineering and Technology. Dr V. S. Somvanshi, DG, FSI, Shri Mehta, General Manager, NABARD, Shri Premchand and Shri M. E. John, Zonal Directors of FSI were present on the dais. The following recommendations emerged as an outcome of the conference.

- (i) to constitute a group for revalidation of marine fishery resources potential in the Indian EEZ.
- (ii) to prepare the roadmap for fisheries development in the Islands to be given effect through the Island Development Authority.
- (iii) to evolve fleet development plan for Indian tuna fishing with suitable fleet reduction plan for Distant Water Fishing Nations (DWFN) fishing for tunas in the Indian Ocean.
- (iv) registration of fishing vessels upto 20m Over All Length(OAL) may be made uniform, in all the maritime States under their Marine Fisheries Regulation Act (s).
- (v) the Marine Engineering Division avaliable with FSI at Kochi may be recommissioned on top priority.
- (vi) awareness may be created to keep the fishing harbours neat and clean maintaining hygienic condition by educating the fishermen with the help of NGO's and State fisheries departments.
- (vii) new fishing harbour infrastracture to be created to commensurate with the present fishing fleet requirements and futuristic needs along east and west coasts including the Island Groups within the Indian EEZ
- (viii) to provide the idea of establishing Ministry of Fisheries and Aquaculture to give effect to the above recommendations.

10.10 COMPUTER WING OF THE INSTITUTE

The Computer division at the FSI headquarters is responsible for hardware, software, networking and training requirements of the head office and base offices of Fishery Survey of India. The Headquarters is connected through Local Area Network while such facilities are being developed at the Base offices.

The process of upgrading the existing technology with advanced client server technology is being initiated at the Institute. The task of upgradation is entrusted with National Informatic Centre(NIC), Pune and the different modules developed are undergoing testing.

FSI has embarked on an ambitious plan of adopting GIS platform for data delivery for the benefit of the users of FSI data products. NIC is entrusted with the project which is at development stage. The institute is also planning to have a web server for launching its own website along with a mail server for its employees. Process of installing Unified Threat Management (UTM) system is also on the anvil.

10.11 Strengthening of Data collection and Information Networking for Fisheries Sector

The Fishery Survey of India contininued to implement the Centrally Sponsored Scheme on *Strengthening of Database and Geographical Information System for Fisheries Sector* and compiling marine fisheries statistics from marine States/UTs and submitting periodical reports to the Ministry by acting as an interface between Ministry and the State fisheries departments.

10.11.1 Recommendations of the Sub-committee of the TMC

The final meeting of Sub-Committee of the Technical Monitoring Committee on Catch Assessment Surveys of Marine Fisheries under the Chairmanship of Dr V. S. Somvanshi, Director General for the development of uniform species code consistent with the Food and Agriculture Organisation (FAO) species code to compute the estimates of marine fish production in scientific manner was held on 25 August 2008 at FSI (HQ's.) Mumbai.

Shri D. Chaudhuri, Director (Fy.Stat & Admin.), Dept.of Animal Husbandry, Dairying and Fisheries and Dr Vinay D. Deshmukh, Principal Scientist and Scientist-in-Charge, CMFRI Research Centre, Mumbai attended the meeting.

The Report of the above Sub-Committee was submitted to the Ministry in September 2008.

As per the recommendations of the Sub-Committee a total of forty major resource groups with one hundred thirty two sub groups were identified for data collection and asked all maritimes states/UTs for incorporation of the same while collecting the data.

The Taxonomy booklet was revised and updated (English version) as per the resources groups recommended by the Sub-Committee.

10.11.2 Training programmes

During 2008-09 two training programmes were conducted on *Data Collection System and Estimation* for the benefit of Data Enumerators recruited under the scheme and to the officials of Goa Directorate of fisheries on 3 & 4 December 2008 and 5 & 6 March 2009 respectively.

10.11.3 Staff strength under Centrally Sponsored Scheme(CSS)

Details of the staff recruited on contract basis under CSS by the FSI at various Bases/HQs during the year 2008-09 are furnished below:

| Base | Name of the Enumerator | Designation |
|---------------|---|---|
| Mumbai (HQs.) | Shri Arun Kumar Dey Shri Munaf H. D. Shri Umesh Mehra Ms Suchitra M. Naik Shri Atish Mane | Statistical Analyst Data Entry Operator Data Entry Operator Data Entry Operator Data Entry Operator |
| Mumbai | Shri M. S. Bhalekar Shri S. S. Jadhav Shri Kiran Baliram Desai Ms Sweta Sunil Sawant | Data Enumerator Data Enumerator Data Enumerator Data Enumerator |
| Mormugao | Shri Chandra H. S Ms Swati Syam Yende | Data Enumerator Data Enumerator |
| Kochi | Ms Sangita V. B. | Data Enumerator |
| Visakhapatnam | Shri V. U. Mahesh | Data Enumerator |
| Chennai | Shri A.Shiva | Data Enumerator |
| Port Blair | Shri A.Sathaiah | Data Enumerator |

The Data Enumerators are collecting data by visiting landing centres/markets on biology, gear and market related aspects of marine fisheries.

10.12 OFFICIAL LANGUAGE ACTIVITIES

10.12.1 Hindi Workshops and Seminars

Mumbai (HQ's)

In the first quarter of the year 2008-09, a one-day Hindi Workshop was organized on 24 June 2008. For the first time, a workshop on *Hindi Typing on Computer* was organized in association with Hindi Teaching Scheme, Navi Mumbai. Shri Ram Sakal Singh, Asstt. Director (Hindi Typing / Short Hand), Hindi Teaching Scheme, Navi Mumbai delivered lecture on the above subject. He gave demonstration on computers for typing the Hindi alphabets and demonstrated typing Devnagari Script using English alphabets. He also gave lecture on the basics of computer operations and its importance in the day to day official work. Fifteen officials participated in the workshop.

In the third quarter, a one-day Hindi workshop was organized on 30 December 2008. The topic of the workshop was on *The importance of official language implementation and the correct method to fill up the Quarterly Progress Report regarding progressive use of Hindi-Some guidelines to keep the record in order*. Smt Sushmita Bhattacharya, Research Officer (Implementation) was invited as the guest Lecturer on the occasion. She gave the practical training on each item of the Quarterly Progress Report proforma and answered the queries raised by the participants. The main objective of the workshop was to help the staff members to overcome the difficulties while filling the Quarterly Progress Report proforma. Seventeen staff members actively participated in the workshop.

In the last quarter, a one-day Hindi Workshop was organized on 25 March 2009. The topic covered in the workshop was the *Use of technical terminology in official Hindi and usage of some sentences in official Hindi*. Dr Sunita Yadav, Assistant Director in Hindi Teaching Scheme was invited as Chief Guest to deliver lecture on the above topic. Practical training was given to the staff members to work in Hindi. Twenty staff members actively participated in the workshop.

Mumbai Base

A one-day Hindi workshop was organised by the Base on 25 February 2009. On the occasion, Shri Rajeshwar Unyal, Central Institute of Fisheries Education was invited to give a lecture. Twenty five staff members actively participated in the workshop.

Visakhapatnam Base

Two Hindi Workshops during 27-28 June 2008 and 25 March 2009 were organised by the Base for the staff members. Dr Rita Trivedi, Faculty and Shri Sarat Chandra Jha, Asst. Director, Hindi Teaching Scheme, Visakhapatnam and Smt P. Uma Rani, Dy. Manager (Hindi Cell), State Bank of India, Zonal Office, Visakhapatnam delivered the lectures.

Kochi Base

As a part of implementation of Official Language, a workshop on Hindi was organised on 18 September 2008. In the workshop, total twenty staff members were trained.

Chennai Base

As a part of implementation of Official Language a Workshop on *Drafting and Noting in Hindi* was organised on 18 February 2009. Shri Komal Singh Chowdary, Assistant Director, Hindi Teaching Scheme, Rajaji Bhawan, Chennai was the Chief Guest.

Port Blair Base

A one-day Hindi workshop was organized on 26 June 2008 on *Application of officially used Hindi* Ms Anasthasias, Sr. Translator, A & N Administration was the resource person of the workshop

A one day Hindi workshop on the topic *Hindi-its present and future status* was organized on 24 September 2008 as a part of the *Hindi fortnight*. Shri Inder Raj Singh, Assistant Commandant, CISF, Port Blair was the Chief Guest on this occasion.

A one-day Hindi workshop was conducted on the topic *Noting*, *drafting* and *daily* usage of official language in administrative works on 20 December 2008 in the conference hall of Base office. Shri Sriram, Asstt. Secretary (OL), Secretariat, A&N Administration was the Chief Guest and resource person on the occasion. The officers and staff of this base attended the workshop.

10.12.2 Hindi day, Hindi week and Hindi fortnight observed by FSI

Mumbai(HQ's)

The Fishery Survey of India (HQ's) observed *Hindi Fortnight* from 1 -15 September 2008. During this period most of the official work was carried out in Hindi. During the Hindi Fortnight five competitions were conducted on the curriculum viz. (i) Hindi dictation, (ii) Hindi Translation, (iii) Hindi essay writing, (iv) Hindi poem recitation and (v) Hindi Typing. A total of twenty five staff members participated in the competitions enthusiastically.

In the competition on Hindi poem recitation, ten employees participated by reciting the poems written by them. Valedictory function of the *Hindi Fortnight* was held on 15 September, 2008. Smt Sushmita Bhattacharya, Research Officer, Regional Implementation Office, Mumbai was the Chief Guest of the function.

Dr V. S. Somvanshi, Director General in his presidential address gave a brief account of the activities carried out by the Institute for promoting and implementing the Official Language Policy of the Union. The Chief Guest in her address said that we should not feel ashamed of doing the office work in Hindi, on the contrary, we should be proud of doing our work in Hindi. She advised to use simple Hindi in the day-to-day work. The Chief Guest gave the prizes

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to the winners of the various competitions. The Programme was co-ordinated by Shri L. K. Rao, Sr. Administrative Officer with the assistance of Smt Meera Vellan Rajiv, Jr. Hindi Translator.

Mumbai Base

Mumbai Base of FSI organized *Hindi Fortnight* from 1-14 September 2008. Various competitions were conducted during this period. The valedictory function was held on 1 November 2008. Shri Rajendra Singh Rawat, Assistant Director (OL), Films Division was the Chief Guest.

Mormugao Base

Hindi Fortnight was observed by Base office from 15-30 September 2008. The programme was inaugurated by Shri N. S. Dalvi, Administrative Officer, National Centre for Antarctic and Ocean Research, Goa on 15 September 2008. During the fortnight various competitions were organised. The Valedictory function was held on 30 September 2008. Dr Z. A. Ansari, Scientist, NIO, Goa was the Chief Guest.

Kochi Base

Kochi Base of FSI celebrated *Hindi Fortnigh*t from 10-24 November 2008. During the Hindi Fortnight various competitions like essay writing, reading, hand writing, music and terminology were conducted in Hindi. The Valedictory function was held on 24 November 2008.

Visakhapatnam Base

Visakhapatnam Base of FSI observed *Hindi Fortnight* from 13 -27 September 2008 and *Hindi day* celebrated on 14 September 2008. Various competitions were conducted for the officers and staff members on the Hindi Day. Smt P. Uma Rani, Dy. Manager (Hindi Cell), State Bank of India, Visakhapatnam was the Chief Guest of the function. The Chief Guest in her speech said that it is our pride to work in our national language, Hindi. She appealed all the staff members to increase the use of Hindi in official work.

Port Blair Base

Hindi fortnight was observed by this Base from 14-28 September 2008. The programme was inaugurated by Dr Govind Singh Panwar, Sr. Lecturer (Hindi), JNRM college, Port Blair on 15 September 2008 followed by a debate competition on the topic *Role of Official Language Hindi in National Integration*. During the fortnight various competitions and group discussion on the topic *Bad & Good in Indian politics and suggestion to improve it* was organized on 20 September 2008. The Valedictory function was held on 29 September 2008. Dr C. V. S. Pandian, Director, Science and Technology, A & N Administration, Port Blair was the Chief Guest who distributed the prizes to the winners of various competitions.

10.12.3 Parliamentary Committee visit

Mumbai (HQs.)

The second Sub-Committee of Parliament on Official Language carried out an inspection on the Official work of FSI, HQ's on 14 June 2008 at The Taj Lands End Hotel, Bandra. During the course of the inspection, the Committee advised to put more and more efforts to increase the usage of Hindi in the official work.

Mormugao Base

The Draft and Evidence Committee, a Sub-Committee of Parliamentary Committee on Offcial Language, under the Chairmanship of Hon'ble Member of Parliament Shri Jay Prakash visited Goa during 7 - 8 September 2008. The committee reviewed the progress of Offical Language implementation in Fishery Survey of India on 8 September 2009. Dr M. E. John, Zonal Director, Dr A. K. Bhargava, Sr. Fisheries Scientist and Shri B. L. Anjana, Hindi Translator attended the review meeting.

Port Blair Base

The second Sub-Committee of the Standing Committee of Parliament on Official Language visited Port Blair during 4-6 February 2009. The committee reviewed the official language implementation work of this office on 5 February 2009.

10.12.4 Training in Hindi

Mumbai (HQ's)

Shri N. S. Madlani, Sr. Clerk passed Hindi Typing Examination during May 2008 with 86% marks.

Shri Ashok S. Kadam, Jr. Fisheries Scientist Gr II passed Hindi Parveen Examination with 79% marks under Hindi Teaching Scheme during November 2008.

Both of them received, a cash award of Rs. 1200/- and personal pay for twelve months.

Smt. Helen Paul, Stenographer Gr II passed Hindi Pragya Examination with 66% marks under Hindi Teaching Scheme in November 2008.

Shri Thule Gopal Wasudeo, Sr. Clerk passed Hindi Pragya examination with 62% marks under Hindi Teaching Scheme in November 2008.

Shri D. K. Pandya, Sr. Clerk passed Hindi Pragya examination with 64% marks under Hindi Teaching Scheme in November 2008.

Three of them received a cash award of Rs. 800/- and personal pay for twelve months.

10.12.5 Awards to FSI

Prashasthi patra and Aashirwad Smriti Chinh for FSI Mumbai (Hqrs.)

Shri S. K. Dwivedi, Sr. Scientific Assistant of FSI was honoured with Prashasthi Patra and Ashirwad Smriti Chinh for best contribution, propagation and publicity of Hindi. The above prize was distributed in the 17 Rajbhasha Sammelan 2008 held on 10 September 2008 at Goregaon, Mumbai.

Certificate of Commendation to Mormugao Base

Mormugao Base of Fishery Survey of India, was awarded a Certificate of Commendation by the Town Official Language Implementation Committee (TOLIC), South Goa for maximum participation and co-operation extended to TOLIC, South Goa in holding competitions during *Hindi Fortnight* organised by TOLIC, South Goa. Dr M. E. John, Zonal Director received certificate from Shri Praveen Agarwal, Chairman, TOLIC, South Goa at the half yearly review meeting held on 15 October 2008.

Rajbhasha Rolling Trophy

Kochi Base of Fishery Survey of India received rolling trophy for doing more work in Official Language Hindi among the Central Govt. Offices located at Kochi.

10.12.6 Participation in TOLIC Meetings/Conferences/Workshops

Dr M. E. John, Zonal Director, Mormugao Base of FSI, attended the half yearly review meeting of Town Official Language Implementation Committee (TOLIC) held on 17 April 2008 at MPT, Guest House, Mormugao. Dr A. K.Bhargava, Sr. Fisheries Scientist and Shri B. L. Anjana, Jr. Hindi Translator attended a special meeting called by the Secretary, MPT, Mormugao on 20 August 2008 in connection with visit of Parliamentary Committee on Official Language. Further, Goa Base of FSI sponsored Hindi Essay Competition for officers which was organised by TOLIC, South Goa during *Hindi fortnight* celebration.

Shri K. Gopalakrishnan, Dy. Director General (Fy) participated in the Town Official Language Implementation Committee meeting held on 10 June 2008 at Western Railway (HQ's), Churchgate, Mumbai.

Shri S. M. Patil, Sr. Fisheries Scientist, Dr (Smt.) S. Varghese, Fisheries Scientist participated in a one-day Hindi workshop held on 23 July 2008 organised by TOLIC, Mumbai at Western Railway (HQ's), Churchgate, Mumbai.

Dr V. S. Somvanshi, Director General, Dr (Smt) S. Varghese, Fisheries Scientist and Smt Meera Vellan Rajiv, Jr. Hindi Translator participated in the Town Official Language Implementation Committee meeting held on 24 September 2008 at Western Railway (HQ's) Churchgate, Mumbai.

Smt Meera Vellan Rajiv, Jr. Hindi Translator participated in the condensed translation training course conducted by Central Translation Bureau from 19-23 January 2009 at the O/o the Accountant General, Churchgate, Mumbai.

Smt Meera Vellan Rajiv, Jr. Hindi Translator participated in one day Hindi Workshop in *Official Language Management* held on 19 February 2009 at Aakashvani & Doordarshan Mumbai organised by TOLIC, Mumbai.

10.13 CO-OPERATION AND ASSOCIATION WITH NATIONAL AND INTERNATIONAL ACTIVITIES

The Director General / his representatives served in the following committees:

- 1. Research Advisory Committee (RAC) for Central Institute of Fisheries Education, Mumbai.
- 2. Committee to consider the proposal for introduction of Vessel Monitoring System (VMS).
- 3. National Task Force on Bay of Bengal Large Marine Ecosystem (BOBLME).
- 4. Committee on Devising Suitable Interventions to Improve the Quality of Marine as well as Inland Fisheries Products.
- 5. Bombay Harbour Security Committee.
- 6. Committee on Optimum number of Fishing Vessels.
- 7. Committee on Empowerment of Women.
- 8. Inter- ministerial Empowered Committee on Marine Fisheries.
- 9.Expert Committee on Fisheries Natural Calamities -Damages to Fishing Crafts and Implements- Assessment of Damages to Mechanized Fishing Boats.
- 10. The NNRMS Standing Committee on Ocean Resources and Meteorology (SC-OM).

THE MANDATE OF FSI

The Fishery Survey of India, Mumbai, under the Ministry of Agriculture, Department of Animal Husbandry, Dairying and Fisheries is the nodal agency for carrying out the survey and assessment of the marine fishery resources of the Indian EEZ within the framework of a well defined mandate. The Mandate of the Institute is tuned from time to time to match with the developmental activities of the fisheries sector as well as to meet the national and global requirements. The present mandate of the Institute as approved by the Evaluation Committee during 2007 is detailed below:

Exploratory surveys, charting of fishing grounds, assessment of fish stocks in the Indian EEZ including adjoining high seas and research thereof besides the specific surveys on request from the States and Union Territories.

Data collection and periodic re-validation of potential of fishery resources to provide advice on fishery management issues enshrined in the national, regional and global conventions and agreements and other associated activities.

Monitoring surveys of fishery resources in the exploited areas including coral reefs, application of Monitoring, Control and Surveillance (MCS) for regulating fishing activities and promoting Code of Conduct for Responsible Fisheries (CCRF) in the Indian EEZ.

Maintain Data Bank and disseminate information on fishery resources to the end-users and act as an iterface between the State/UTs and the Ministry of Agriculture, Government of India for marine and inland fish productin and related aspects.

Assessment of suitability of fishing gear, accessories and equipment with special reference to the preservation of environment and ecology of marine habitat.

Fish stock identification and biodiversity studies including application of genetic tools and techniques.

Marine fisheries forecasting including application of remote sensing for the benefit of artisanal, mechanised and industrial sectors.

Human Resources Development through practical training of fishing operatives, fishermen, fisheries officers and students.

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