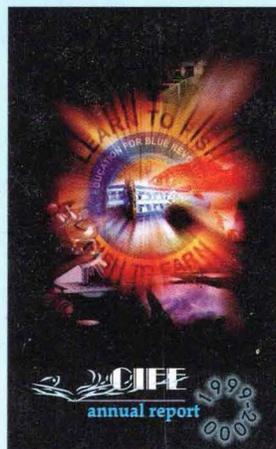




 **CIFE**  
national fisheries university  
**annual report**

1999-2000

# CREDITS



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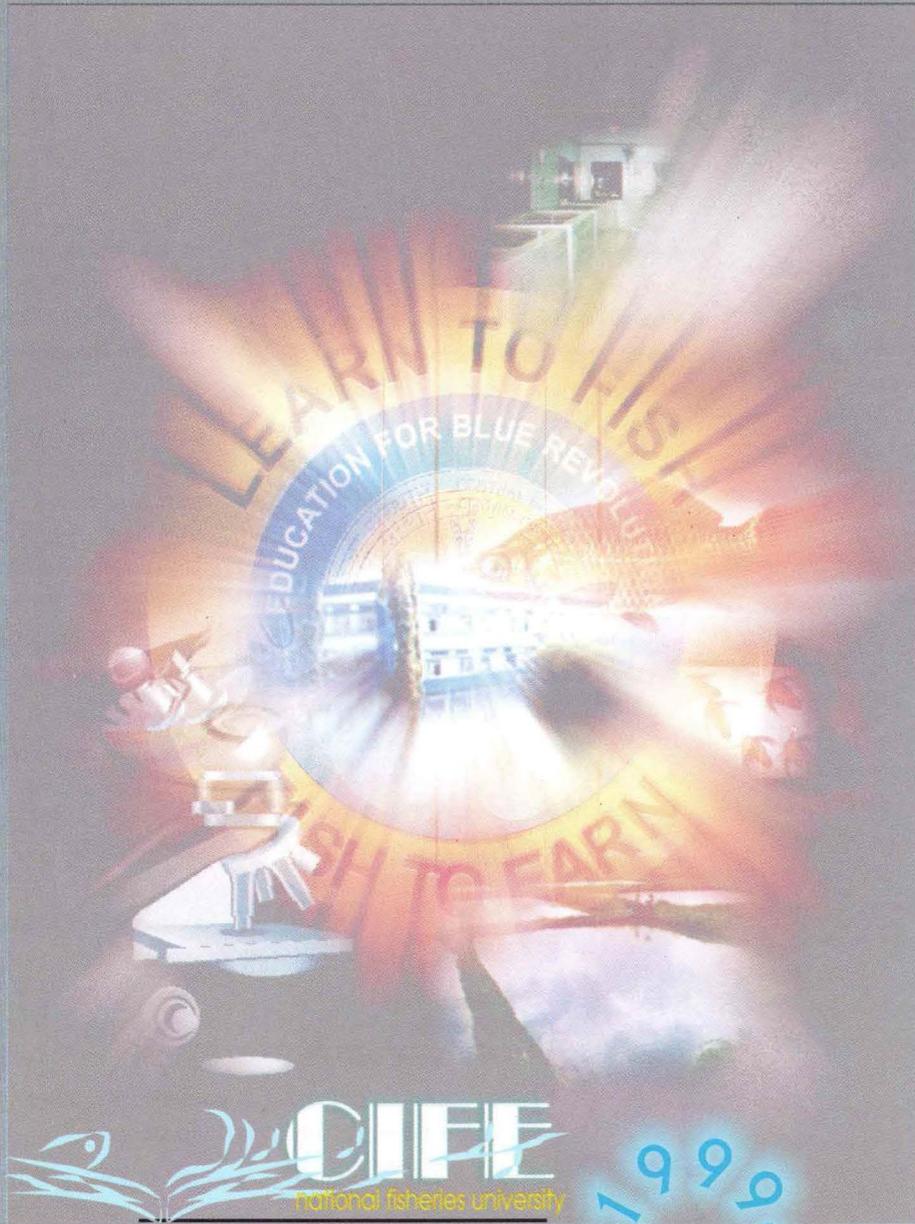
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annual report

1999-2000

## 2. EXECUTIVE SUMMARY

The Master's and Doctoral programmes offered by the Institute at its Head Quarters and Centres, as also the Central Marine Fisheries Research Institute (CMFRI), Kochi, the Central Institute of Fisheries Technology (CIFT), Kochi, and the Central Institute of Freshwater Aquaculture (CIFA), Bhubaneswar progressed satisfactorily as per schedule. A total of 44 students successfully completed the various M.F.Sc Programmes, while one candidate completed the Ph.D. in Inland Aquaculture. 19 trainees, constituting the last batch of D.F.Sc., completed the programme successfully, while 32 trainees completed the 1 year PG Certificate Programme in Inland Fisheries Development and Administration from the Calcutta Centre. 15 students enrolled for the various Ph.D. Programmes while 38 enrolled for the 5 M.F.Sc. Programmes. The Calcutta Centre enrolled 41 trainees for the 1-year PG Certificate Programme.

A total of three training programmes for scientists/faculty members from research establishments/Universities were conducted under the scheme of CAS in Fishery Science; 50 participants were trained under these programmes. 6 guest lectures by external faculty and 3 special lectures under the aegis of the ARS Forum by CIFE faculty were organized for the benefit of the students. The CIFE

faculty was also active in delivering 30 guest lectures to other Institutes.

15 Institute-funded research projects and 8 externally-funded research projects went on. Notable research achievements included the successful induced breeding of *Clarias batrachus*, the identification of analgesic activity in the crude venom of three species of the gastropod genus *Conus*, extraction of prawn flavour for value addition, induction of food searching behavior in *Labeo rohita* by addition of *Cyperus* tuber extracts in feed, standardization of certain techniques pertaining to the culture of prawns and fishes using inland saline water, identification of 202 histamine forming microflora, etc. Student research culminated in the submission of 56 dissertations. Nine short-term training programmes of durations varying between 7 days and 6 months were conducted and a total of 213 candidates were trained. The Fishery Advisory Service catered to 100 farmers and entrepreneurs. 120 samples of soil and water were analysed for the aqua farmers and entrepreneurs by the aquaculture laboratory at the Institute. 550 students from primary to post graduate level visited the Institute during the year. Other extension activities included the conduct of three exhibitions and one awareness camp at a fishing



# EXECUTIVE SUMMARY



village. The year also witnessed the release of a spate of Hindi publications on various aspects of fisheries and aquaculture.

CIFE was the proud recipient of a number of laurels. The quality of the Course Manuals published by the Institute for the different CAS training programmes were acknowledged when ICAR bestowed a Certificate of Appreciation to the CIFE as part of the Commemoration of the Golden Jubilee Celebration of India's independence. The Institute's athletes and sportsmen bagged three first prizes and one second prize in the ICAR Inter Institute Sports Tournaments for Zone II. CIFE was adjudicated the best of all ICAR Institutes in implementing Hindi through publication of manuals and books in Hindi and was awarded the First Rajshree Tandon Award of the ICAR. Dr. S.A.H. Abidi, Director, was invited to join the National Academy of Agricultural Sciences as a Fellow and also nominated to the Editorial Board of the *Indian Scientific and Industrial Journal* of the CSIR for a period of 3 years. While Dr. S.D. Singh, Principal Scientist won two international recognitions as 'Man of the Year 1999' and one among '2000<sup>th</sup> Outstanding Intellectuals of the 20<sup>th</sup> Century,' an article by Dr. (Mrs.) Neelam Saharan, Senior Scientist won her the Dhuru Morarji Memorial Award of the Fertilizer Association of India.

Publications included 5 compilations of abstracts of the concerned seminars/symposia, 13 training manuals and 13 books besides 5 extension bulletins (4 of them in Marathi) and a large number technical and non-technical papers in national and international journals. 80 papers were presented by the staff of the Institute to various Seminars/Symposia/Conferences.

The Institute conducted 5 national level seminars on Aquatic Biotoxinology; Fisheries Biotechnology; Fisheries Economics, Extension and Management; Fish Disease and Use of Saline Soils for Aquaculture (in Hindi).

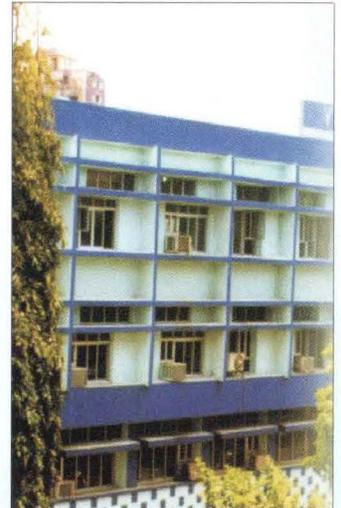
Infrastructure development during the year included the creation of two new laboratories, one for biochemistry and another for molecular genetics and biotechnology, installation of peer to peer computer network and a Red Hat LINUX 6.0 server, addition of 735 new entries to the library besides 33 issues of Indian Journals and 201 issues of international journals as also 3 CD-ROMs.

Extra-curricular activities included the celebration of *Tika Samaroha*, *Ganesh Chaturthi*, and Annual Day wherein family members of the staff, students and staff took part in the cultural programmes.

Ever since its establishment in 1961, the Central Institute of Fisheries Education (CIFE), Mumbai, has played a pivotal role in post-graduate fisheries education and training. Research and extension endeavours were strengthened with the transfer of administrative control of CIFE from the Government of India to the Indian Council of Agricultural Research (ICAR) in 1979. In due recognition of its yeomen services to the development of Indian fisheries in general and human resource development for the purpose in particular, CIFE was deservedly conferred the coveted status of Deemed University in 1989. This decade-old deemed university has registered remarkable progress since then. Today, CIFE stands, tall as a premier *alma mater* in the global fisheries map.

The present campus of CIFE is located in a lush green campus of about 2.22 ha at a distance of about half a kilometer from the Versova beach at Mumbai. The main establishment of the Institute is housed in a three-storied building with all essential infrastructural facilities like classrooms, laboratories, library, aquarium, etc.

The Institute's headquarters at Mumbai has easy access from any corner of the Mumbai metropolis. The headquarters is located around 200 m away from the Seven Bungalows Bus Depot in Andheri (West), and is at a distance of about 38 km, 26 km, 20 km and 5 km from CST, Dadar, Kurla Terminus and Andheri railway stations and about 9 km and 15 km away from domestic and international airports, respectively.



#### MANDATE

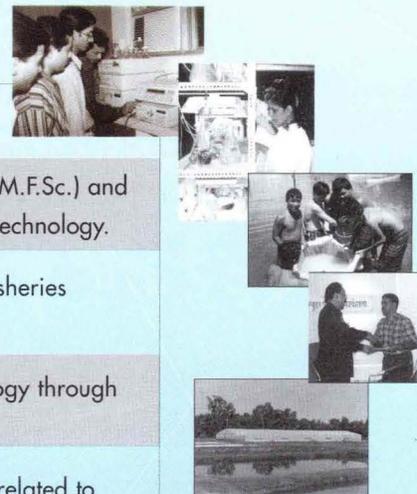
To conduct education and research programmes leading to post-graduate (M.F.Sc.) and doctoral (Ph.D.) Degrees in specialised disciplines of fisheries science and technology.

To conduct capsule courses for catering to the refresher training needs of fisheries developmental and extension personnel.

To conduct basic research in frontier areas of fisheries science and technology through institutional and collaborative efforts.

To conduct need-based capsule/vocational training on various technologies related to fisheries and allied disciplines.

To provide institutional support for consultancy and participation in sponsored projects and programmes with other institutions and agencies for fisheries research in inland, coastal and marine (both within EEZ and beyond) sectors.



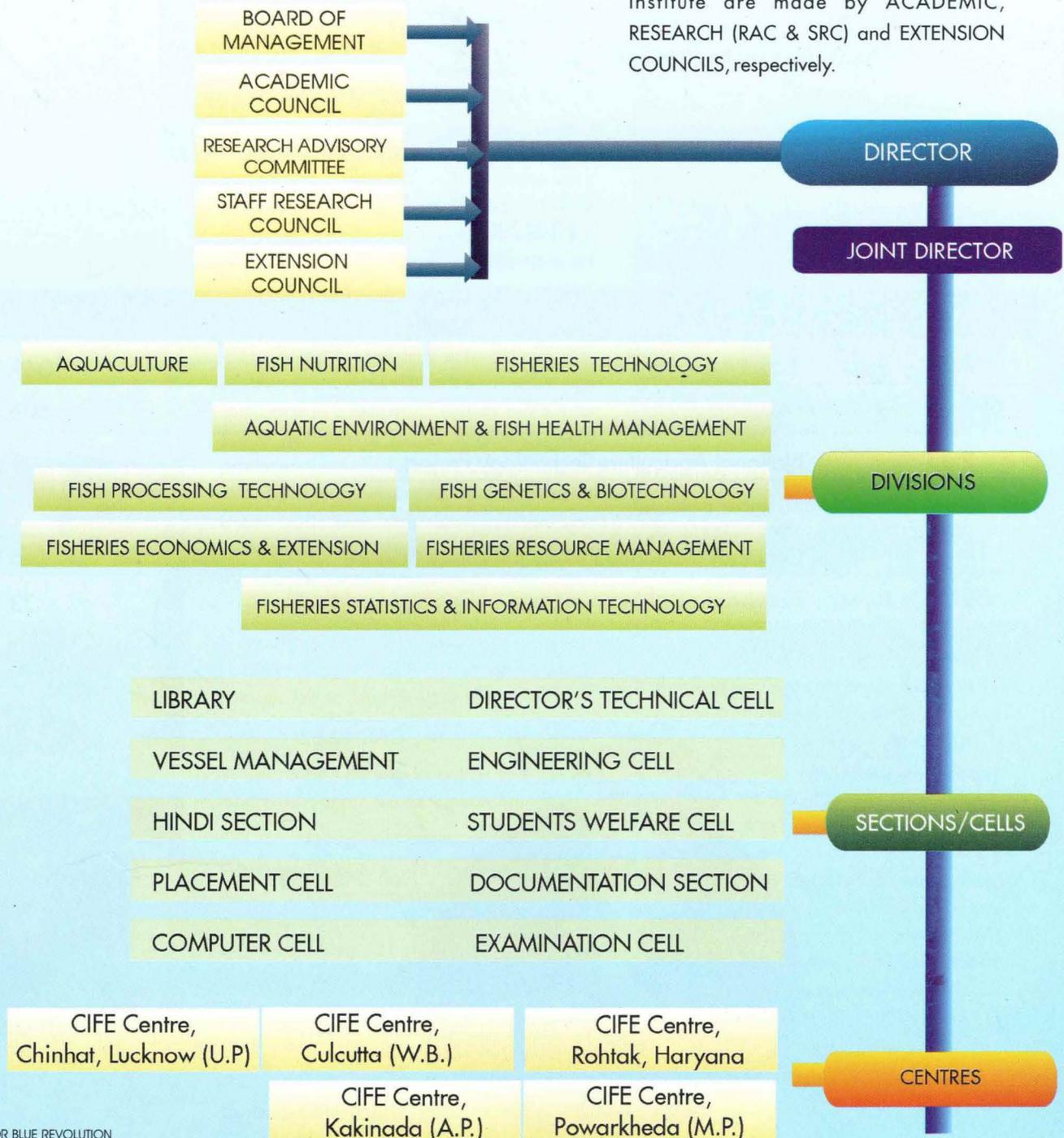
# INTRODUCTION

## ORGANIZATION AND MANAGEMENT

CIFE has a Director and a Joint Director in its Research Management Positions together with a team of Principal Scientists, Senior Scientists and Scientists besides a fairly big force of technical, administrative and supporting staff (details given in table below). The present set up of the Institute in terms of divisions, sections, cells/units and subcentres,

depicted in the form of organogram, is given in figure 1.

At the helm of affairs of overall Institutional Management, CIFE has a BOARD OF MANAGEMENT which also forms the highest decision making body at Institute level on all matters. The decisions and recommendations pertaining to academic, research and extension activities of the Institute are made by ACADEMIC, RESEARCH (RAC & SRC) and EXTENSION COUNCILS, respectively.

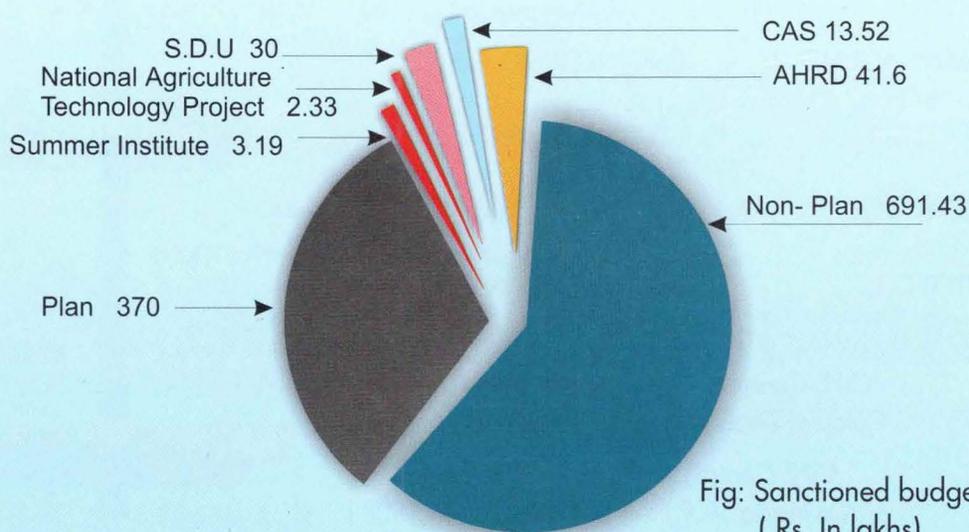


The staff position as on 31 March 2000 is as follows :

CATEGORIES	SANCTIONED	FILLED	VACANT
<b>RESEARCH MANAGEMENT POSITIONS</b>			
Director	01	01	--
Joint Director	01	01	-
SCIENTIFIC	90	53	37
TECHNICAL	141	123	18
ADMINISTRATIVE	72	67	05
ADMINISTRATIVE(NON-MINISTERIAL)	2	2	-
SUPPORTING	116	107	09
<b>TOTAL</b>	<b>423</b>	<b>354</b>	<b>69</b>

## FINANCE

Sanctioned	Heads	Expenditure
370.00	Plan	369.99
691.43	<b>Non-plan</b>	606.63
2.33	National Agriculture Technology Project	1.38
3.19	<b>Summer Institute</b>	3.19
13.52	Centre of Advanced Study in Fishery Science	8.86
30.00	<b>Plan Scheme of Strengthening of Deemed University</b>	33.59
41.60	AHRD	40.61



## 4. RESEARCH ACHIEVEMENTS

Induced breeding of *Clarias batrachus* (Magur) with grand success for the first time.

An attempt made at Lucknow center of CIFE to develop the technology of breeding and culture of Indian Magur *Clarias batrachus* was successful. This Asian Catfish commonly known as *desi magur* in northern India is highly priced and has a good market value of Rs. 100-150 per kg. The availability of *magur* seed in the wild being very poor 100 fingerlings were purchased from the market and cultured in cement cisterns. They were fed supplementary feed containing rice bran, oil cake and fish meal. The selected breeders were induced bred using synthetic hormone preparation "Ovaprim". The females were stripped after 12-14 hours of injection, while the males were cut open and milt obtained. Fertilized eggs were transferred to a newly set up *magur* hatchery for development in water flow system.

Hatching of eggs occurred after 28-30 hours, and the yolk sack absorption was completed in a few days. Slightly more than 8,000 numbers of *magur* fingerlings were produced out of which 7,500 fingerlings of 1-2 inches size were sold to U.P. fisheries Dept., GB Pant Agricultural University, Pantnagar, CIFE Rohtak Center and private fish culturists from Lucknow.

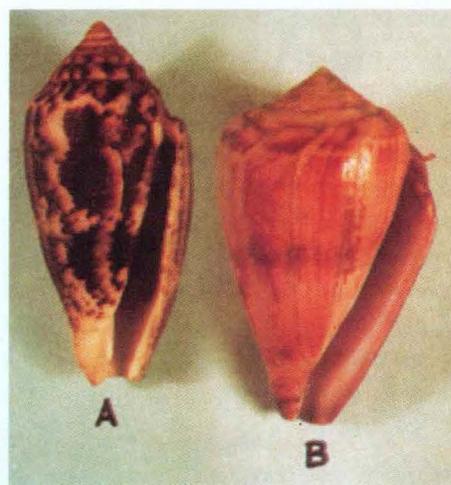
Further refinement of the technology is underway in order to workout its economic viability to disseminate it to aquaculturist through lab to land programme.

Value added products from low cost fish by modern and improved conventional methods.

Flavour was extracted from prawn fish head using 0.67 M NaCl solution and enzyme papain. Extracted flavour was dried. In addition, prawn head lipid was also extracted using 2: 1 (v/v) chloroform: methanol mixture which has shown good prawn flavour.

Screening, characterization and evaluation of feeding stimulants and flavour extractants.

Preliminary investigations revealed that the crude extract from *Cyperus* tubers elicited food searching behaviour in fingerlings of rohu (*Labeo rohita*). It has been observed that fishes showed more preference to the feed mixed with *Cyperus* tubers. Further work is under progress.



Mapping of Biotoxins in Marine Cnidarians and Coniids and Evaluation of their Beneficial Properties.

Based on pilot studies 3 coniids (*Conus mutabilis*, *C. lentiginosus* and *C. textile*) and 2 Cnidarians (*Aurelia solida* and *Chiropsalmus buitendjiki*) were shortlisted for further studies. Alternate freeze-thaw method was standardized as the best method of nematocyst isolation. Microbasic mastigophores and basitrichous isorhiza were the dominant nematocyst types in *C. buitendjiki* and *A. solida* respectively; stenoteles and desmonemes also co-existed in both the species. Standard mouse bioassays revealed *C. textile* and *C. buitendjiki* to be most toxic. All toxins had a potent hemolytic activity while none of them were edemetic. Crude toxins of all 3 *Conus* species had varying levels of analgesic activity. Further work on



fractionation and chemical studies are in progress.

## Standardization techniques of multiple carp spawning and seed production on commercial basis in semi-arid eco region of Haryana (AP Cess funded)

Brood stock of Indian Major carps namely rohu (*Labeo rohita*), Catla (*Catla catla*), Grass carp (*Ctenopharyngodon idella*) were maintained in poly-house especially constructed for this purpose. The brood stock was harvested from the poly-house and transferred to earthen ponds of 200 sq.mts. area. In the month of July and August IMC and Exotic carps were attempted to breed in earthen ponds at a very high temperature. *Labeo rohita* could be successfully spawned in the pond water. Eggs were hatched in traditional double hapa system. As a result about 10,000 numbers of rohu spawned was salvaged during the spawning season of 1999.

An experiment was conducted to rear rohu seed using formulated diet against conventional feed. The weight of rohu fed with conventional feed was 175 gms whereas the other set fed with formulated diet was 975 gms.

## Standardization of technique for commercial seed production of freshwater prawn using inland saline water (AP Cess funded).

In order to develop brood stock for larval rearing under controlled condition by using underground saline water a low-cost poly-house was constructed over the earthen pond by covering with UV stabilized LDPE sheet which was suspended over the GI wire. This system facilitates to roll back the LDPE sheet after winter season. The minimum water temperature of 15 C was recorded in peak winter season, while in the other pond the



minimum water temperature was 7° C. Prawns stocked in the poly-house were regularly fed with formulated pelleted diet and water quality was maintained at optimum level. In the month of March, 2000 polythene sheet was removed and stock was sampled and it was observed that some of the male prawn showed maximum weight of 250gms and some berried females weighed between 60-80 gms.

Saline water deep tube well was constructed with the maximum depth of 220 feet, the water sample was drawn at 50, 100, 150, 200 and 220 feet depth and analysed. Salinity varied from 10-27.5 ppt. Other chemical parameters are as follows: water hardness 3984-7592 ppt, alkalinity 180-256 ppm, pH 7.43-7.49, EC 36.08-46.97 mhos, TDS 20.90-27.30 ppt, Fe 0.07-0.14 ppm, Cu 0.06-0.010 ppm, Zn 0.05-0.16ppm. Installation of suitable pumpset is in progress.

Some pilot experiments were conducted to study the hatching efficiency of *Artemia* cyst at different salinity levels of ground water. It was observed that hatching was normal and 80% of the cyst hatched during 14-18 hours period. The berried females were shifted to the spawning tanks in the hatchery shed for experiment of larval rearing to be conducted in April.

## Microflora associated with histamine formation and histamine decomposition (A.P. Cess funded).

428 suspected colonies were isolated of which 202 were confirmed as histamine formers. Out of 202 isolates, 159 colonies were confirmed upto species level and 103 upto generic level.

## Harvest technology and catch composition of deep sea fishery resources in the Indian EEZ (DOD funded).

A total of 10 stations in the Central Arabian Sea (10 14 N latitude) were sampled during the cruise of FORV Sagar Sampada for assessing the efficiency of various gears such as HOT Net, Crustacean trawl etc. and data recorded.

# RESEARCH ACHIEVEMENTS

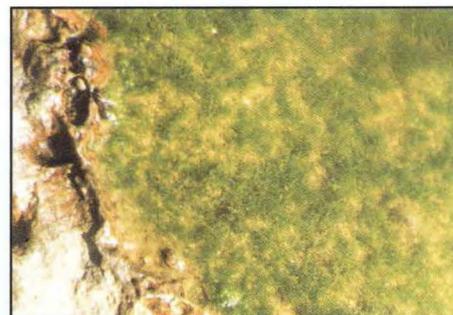
Cruise No. 181 covered the north-west coast of India between 4- 22 February. Field tests of 51.0m long wing trawl and 33.7 m mega mesh trawl were carried out besides trawl configuration measurements at different speeds. Selectivity studies of fishes through square meshes was also carried out using 38.0m HSDT fish trawl. The highlights of the cruise studies are as follows:

1. The 51.0 m long wing trawl had a maximum of CPUE of 150.9 Kg and 33.7 HSDT - II Fish Trawl of 247.0 kg.
2. A total of 7993.0 kg of fish including miscellaneous fish was caught during the course of experiments by using three different trawl nets.
3. Semi pelagic species like *Priacanthus hamrur* (41%), *Tachysurus* spp.(8.2%), *Protonibea dicanthus* (7.1%), Barracuda (7%) , *Pseudocaranx dentrex* (3.9%) dominated in the total catch including miscellaneous fish.
4. Observations with the 50mm and 80mm square mesh panels, 4m X 2 m with 25 mm mesh covers fitted in the cod end of 33.7 m HSDT II fish trawl showed the escapement of juveniles of *Saurida* sp., Squids, *Leognathus* sp., *Platicephalus*, *Apogonids*, and *Cynoglossus* sp.

Development and refinement of technology package for tissue culture, indoor and outdoor culture of selected food value seaweeds and their product development for health nutrition.

Seasonal samples for seaweeds were done at three sites viz. Bombay coast, Ratnagiri and Malvan. Bulk collection of *Prophyra* and *Ulva* was done from Ratnagiri and Malvan and these were analysed for their nutritive value. Fresh as well as preserved recipes are

being prepared from these seaweeds. Live samples of these seaweeds were subjected to tissue culture trials. Non-axenic culture could



not be tried. During last one year sampling sea weeds reported along Bombay coast were identified as *Ulva lactuca*, *Ulva fasciata*, *Ulva rigida*, *Enteromorpha intestinalis*, *Enteromorpha clathrata*, *Gelidium pusillum*, *Cladophora*, *Caloglossa lepuini* and *Sargassum tenarrimum*.

Identification of new candidate species for mariculture and standardization of relevant techniques (DOD funded).

Month-wise water samples were brought and analysed for hydrobiological and hydrochemical parameters to study the ecology of selected species *Fabrea salina*. The analysis has revealed the positive relationship between high salinity, high temperature , green algae *Dunaliella* and abundance of *Fabrea salina*. Proximate composition of *Fabrea* was found to be 56-59% protein, 33% fat, 1% ash and 1% carbohydrate. Analysis of fatty acid profile has revealed the presence of linoleic acid, biolenic acid, stearic acid, oleic acid, arachidic acid and palmitic acid.

Preliminary culture experiments were carried out with promising results at salinity between 40-90 ppt with generation period of 12-22 hours.







- Student : Tapan Raychaudhuri                      Guide : S. K. Pandey
42. *Utilization of Wetlands Resources for Aquaculture with Special Reference to Bishnupur District, Manipur*
- Student : Guruaribam Sunita Devi                      Guide : A.K.Reddy
43. *Liming, Chlorination and Ozonation in Aquaculture Practices*
- Student : Gopal Sherpa                      Guide : Chandra Prakash
44. *A Comparative Study of Operational Performance of Private and Government Hatcheries in Tripura State*
- Student : Ratan Karmarkar                      Guide : Surykant Patil
45. *Scope of Cold Water Fisheries in Assam - Present Status and Future Prospects*
- Student : Prakash Kumar Deva Sharma                      Guide : R.K.Langer
46. *Delivery System in Fisheries Development in Raenareli District (U.P)*
- Student : Ashok Kumar Shukla                      Guide : S.N.Ojha
47. *Status and Prospect of Integrated Fish Farming in Tribal Areas of Tripura*
- Student : Kumud Deb Barma                      Guide : Chandra Prakash
48. *Use of New Hormonal Formulation 'Ovatide' for Induced Breeding of Carps in Manipur*
- Student : Guruaribam Aruna Devi                      Guide : A.K. Reddy
49. *Assessment of Constraining factors in Development of Aquaculture Programmes in Arunachal Pradesh and Suggested Remedial Measures*
- Student : Liagi Lasa                      Guide : A. K. Reddy
50. *Present Status and Prospects of Freshwater Prawn Farming in Tripura*
- Student : Haran C. Roy                      Guide : A. K. Reddy
51. *Performance Appraisal of Model Scheme on Wheat-cum-Fish Culture*
- Student : Ajit Kumar Singh Bhadauria                      Guide : S. N. Ojha
52. *Comparative Study of Operational Performances of Wet Bundhs, Dry Bundhs and Eco-Hatcheries in Bankura District, West Bengal*
- Student : Jagannath Goswami                      Guide : Suryakant Patil
53. *Prospects of Trout Culture in Arunachal Pradesh*
- Student : Jawal S. K.                      Guide : R. K. Langer
54. *Impact of Training Programmes on Fish Farmers in Morena*
- Student : Anil Kumar Awasthi                      Guide : S. N. Ojha
55. *Role of Circular Hatcheries in Fish Seed Production in Assam with Special Reference to Nagaon District*
- Student : Utpal Bora                      Guide : A. K. Reddy
56. *Utilization of Wetlands Resources for Aquaculture with Special Reference to Bishnupur District, Manipur*
- Student : Gurubariram Sunita Devi                      Guide : A. K. Reddy

# 5. EDUCATION ACHIEVEMENTS

## 5.1 Academic Programmes

The details of enrolments and results declared pertaining to the various academic programmes offered by the Institute for the year 1999-2000 are as follows:

### Results Declared

Name of the programme	Offered at	Year(Batch)	Result declared
M.F.Sc.(Fisheries Resource Management)	CIFE	1997-99	19
M.F.Sc (Inland Aquaculture)	CIFE	1997-99	16
M.F.Sc (Mariculture)	CMFRI	1997-99	9
Ph.D. (Inland Aquaculture)	CIFE		1
Diploma in Fisheries Science (D.F.Sc.)	CIFE	1997-99	19
P.G. Certificate in Inland Fisheries Development & Administration	CIFE Centre, Culcatta	1998-99	32
Total			96

### Enrolments

Name of the programme	Offered at	Year ( Batch)	Enrolment
M.F.Sc. (Fisheries Resource Management)	CIFE	1999-2001	8
M.F.Sc (Inland Aquaculture)	CIFE	1999-2001	9
M.F.Sc (Mariculture)	CMFRI	1999-2001	10
M.F.Sc (Freshwater Aquaculture)	CIFA	1999-2001	5
M.F.Sc (Post-Harvest Technology)	CIFT	1999-2001	6
Ph.D. (Fisheries Resource Management)	CIFE	1999-2001	5
Ph.D. (Inland Aquaculture)	CIFE	1999-2001	5
Ph.D. (Mariculture)	CMFRI	1999-2001	5
PG. Certificate in Inland Fisheries Development & Administration	CIFE Centre, Culcatta	1999-2001	41
Total			94

CIFE: Central Institute of Fisheries Education, Mumbai

CIFA: Central Institute of Freshwater Aquaculture, Bhubaneshwar

CMFRI: Central Marine Fisheries Research Institute, Kochi.

Curricular schedules of all the above programmes progressed satisfactorily as per the time frame. These programmes were well supported by a series of student seminars, guest lectures, study tours, field visits. Etc.

## 5.2 Guest Lectures

1. 7 April, 1999  
Dr. Gerrit Hoogenboom,  
Department of Biological and Agricultural Engineering,  
University of Georgia, Griffin, Georgia.  
Topic: Geographical Information Systems for Management of Natural Resources
2. 15 April, 1999  
Prof. Daniel Dutkiewics,  
Prof. Edward Kolakowski and  
Prof. Piotr Byokowski (Polish Delegation)  
Topic: Processing of Krill and Future Prospects of Antarctic Research.
3. 23 April, 1999  
Prof. (Dr.) Gadekar, Vice-Chancellor  
Babasaheb Bhimrao Ambedkar University,  
Lucknow.  
Topic: Academic Programmes Relevant to Developments of Down-trodden Sections of Society; A Case Study of B.B. Ambedkar University, Lucknow.
4. 24 May, 1999  
Dr. B.K. Srivastava,  
Emeritus Professor, Lucknow University,  
Lucknow  
Topic: Environment and Industrial Pollution
5. 25 July, 1999  
Prof. S.R. Hashim,  
Hon'ble Member (Agriculture and Irrigation )  
Planning Commission,  
Topic: The Food Security Vision of India
6. 18 August, 1999  
Prof. Sher Ali,  
Chief of Molecular Genetics Laboratory,  
National Institute of Immunology, New Delhi.  
Topic: Molecular Mining of Human and Animal Genomes: Emerging Concepts and Future Directions

# EDUCATION ACHIEVEMENTS

## 5.3 CAS Training Programmes conducted:

Title of the course	Date	No. of participants
Recent Advances in Aquaculture of Carps and Freshwater Prawns	12 August-10 September 1999	16
Recent Advances in Fish Immunodiagnosics	01-30 November 1999	14
Recent Advances in Marine Biotxinology	10-31 January 2000	20

## 5.4 ARS Forum lecture series

Under the Agricultural Research Service Scientist's Forum Central Unit, New Delhi, a series of lectures were arranged, the details of which are as follows:

1. 15 January 2000  
Dr. G. Venkateshwarlu,  
Sr. Scientist, CIFE  
Topic: Gas Chromatography Technique and Applications
2. 19 February, 2000  
Dr. (Mrs.) Kiran Dube,  
Sr. Scientist, CIFE  
Topic: Pearl Culture Technique and Possibilities
3. 18 March, 2000  
Dr. S.C. Mukherjee,  
Principal Scientist, CIFE  
Topic: Aflatoxicosis in Fish



## 5.5 Invited lectures delivered by CIFE faculty

1. 24 April, 2000  
Mr. A.K. Reddy, Technical Officer  
Culture of Giant Freshwater Prawn and its Economics  
Katihar, Bihar
2. 4 June, 1999  
Mr. A.K. Reddy, Technical Officer  
Environmental Impact Assessment for Coastal Aquaculture  
Management Plan at 'Farmers Meet on Eco-friendly and Sustainable  
Shrimp farming'  
MPEDA Regional Centre, Alibag (Maharashtra)
3. 14 October, 1999  
Mr. A.K. Reddy, Technical Officer  
EIA studies in Aquaculture Projects  
MPEDA Regional Centre, Alibag (Maharashtra)
4. 21 October, 1999  
Dr. S. K. Chakraborty, Senior Scientist  
Marine Fisheries  
Lal Bahadar Shastri Academy of Nautical Sciences,  
Mumbai.
5. 4 November, 1999  
Mr. A.K. Reddy, Technical Officer  
Eco-friendly & Sustainable Prawn Farming  
Krishi Vigyan Kendra, College of Agriculture, Dhule
6. 1 December 1999- 28 February, 2000  
Shri. G. K. Rao, Technical Officer  
Bio-Statistics ( 26 Lectures)  
Mumbai University,  
Mumbai.
7. 21 January, 2000  
Dr. S. D. Singh, Principal Scientist  
Advances in Fish Processing Technology  
National Seminar held at W.B. University of Animal and Fisheries  
Science.
8. 24-25 January, 2000  
Shri. Pratap Kumar Das, Hindi Translator  
Karyalayin Anuvad : *Vayvahar evam Siddhant* (In Hindi)  
S.N.D. T Women's University,  
Mumbai

# 6. EXTENSION ACHIEVEMENTS

## 6.1 SHORT TERM TRAINING PROGRAMMES

Nine Short-term training programmes (7 days to 6 months duration) were conducted for in - service personnel and private entrepreneurs. A total of 213 participants received training on various aspects of fisheries as detailed below.

Sr.No	Name of the Course	Duration	No. of participants
1	Hatchery and Grow-out Aspects of Freshwater Fishes (Capsule course)	1 <sup>st</sup> March 99 to 31 Aug. 99	24
2.	Matsyapalan Ki Adhunit Vidhiya	16-31 July 99	72
3.	Management of Freshwater Fish Farm	16-30 Aug.99	16
4.	Hatchery and Grow-out Aspects of Freshwater Fishes.	1 <sup>st</sup> Sept.99 to 29 Feb.2000	28
5.	Usal Bhumi Mein Matsya Palan Prabandh. (Workshop)	20-25 Sept. 99	14
6.	Management of Giant Freshwater Prawn Hatchery	04-14 Oct.99	14
7.	Mitha Pani matsya Prakahsetra Phrabandh	25 Oct. to 06 Nov.99	18
8.	Matsya Parisanskaran Ewam Punarotpadan. (Workshop)	01-06 Nov.99	23
9.	Culture of Live food Organism for Aquahatcheries.	05-11 Dec.99	04
Total			213

CIFE H.Q., Mumbai     CIFE Centre, Lucknow (U.P.)  
 CIFE Centre, Powarkheda (M.P.)     CIFE Centre Rohtak, Haryana



## 6.2 Fishery Advisory Service(FAS)

100 queries on fish farming (70), processing (20) and on details of academics (10) were answered during the year. One hundred and twenty water and soil samples of aqua farmers were analysed by the Institute.

## 6.3 Replies to Queries and Issue of the Institute Publications

A large number of postal queries were also received from private entrepreneurs, students, regarding various aspects of aquaculture, etc. Fifty such queries were answered by post and publications of the Institute were distributed to 150 visitors.

## 6.4 Fisheries Awareness Programme

550 students from all over India visited the Institute as a part of their study tour during the period. The composition of the groups was as follows.

Primary / Secondary	065
Under graduate	343
Post graduate	027
B.F.Sc.	045
CIFE Centres	070
Total	550

They were appraised of the on going activities of the Institute and were taken around various Divisions / Laboratories. Film shows were also arranged for them. As and when requested, visits to the other Fisheries organisations in Mumbai viz. Fishermen Co-operative Society, Versova, Sassoon Dock and Ferry Warf, fish landing centres, Taraporewala Aquarium, Shivaji Fish Market, etc. were arranged.

## 6.5 Exhibitions

An exhibition was organised on the occasion of the *Fifth Indian Fisheries Forum* at CIFA, Bhubaneshwar (17-20 January 2000).

An exhibition was organised on the occasion of the National Seminar in Hindi at Rohtak on 23-24 March 2000 to motivate the farmers and extension officers to promote aquacultural practices in the saline soils.

## 6.6 Awareness Camp

An awareness camp regarding alternative vocations available in fisheries was held from 13 to 15 March, 2000 at Mahul fishing village, Chembur, Mumbai in collaboration with the Bharat Petroleum Corporation Ltd. Dr. S.C. Mukherjee, Director Incharge, Dr. (Mrs) R. Tewari and Dr. S.N. Ojha participated in the inaugural function which was also attended by Mr.



# EXTENSION ACHIEVEMENTS

Appalwar, IAS, Commissioner of Fisheries, Maharashtra, Mr. S.K. Biswas, Regional Director (West), NCDC, and Mr. Reddy, General Manager, Social Welfare, BPCL, Mumbai.

An exhibition depicting the technologies available in fisheries was organised at Mahul village on the occasion. A fishermen's *goshthi*, where a panel of scientists from different disciplines of CIFE answered the queries of the fisherfolk was held on 14 March 2000. Scientists from Bhabha Atomic Research Centre, Mumbai also participated in the discussion. The following publications were specially brought out on this occasion by the Extension Division of the Institute.

- *Kendriya matsya shikshan sansthan - ek parichay* (Marathi)
- *Godya panyatil zhingayachi sheti* (Marathi)
- *Nimkharya panyatil kolambi chi sheti* (Marathi)
- *Mase va zHINGA pasun khadya padharth* (Marathi)

About a thousand fisherfolk visited the exhibition and more than 200 fisherfolk participated in the *goshthi*. The exhibition and the seminar generated a lot of interest and awareness among the fishermen community about the recent technological developments in fisheries sector.



## 7. HONOURS AND AWARDS

In commemoration of Golden Jubilee Year of India's Independence, the Education Division of ICAR has awarded a Certificate of Appreciation to CIFE, Mumbai for organising the CAS training programmes for Human Resource Development and developing excellent instructional materials. The appreciation Certificate was received by Dr. S.A. H. Abidi, Director, CIFE.



The National Academy of Agricultural Sciences has invited Dr. S.A.H. Abidi, Director, CIFE, Mumbai to join as a fellow of this Academy from 1 January 2000.

The Director General, Council of Scientific and Industrial Research has nominated Dr. S.A.H. Abidi, Director, CIFE, Mumbai on the Editorial Board of *Indian Scientific and Industrial Journal* for a period of 3 Years.

### Sports

This Institute participated in the ICAR Inter-Institute Sports Tournament (Zone II) held at Central Arid Zone Research Institute (CAZRI), Jodhpur (Rajasthan) from 09 to 14 November 1999 and won the following prizes.

Event	Member(s)	Prize
Men's Relay (4x100m)	Mr. Surajbali Jaiswal Mr. Mahesh Waghela Mr. J. M. Koli Mr. Vijay Kuveskar	First
Men's Running Race (200 m)	Mr. Surajbali Jaiswal	First
Men's Running Race (400 m)	Mr. Surajbali Jaiswal	Second
Kabaddi	Mr. Bhaskar Mandare (Captain) Mr. Raju Kadam Mr. Raghuv eer Prasad Mr. Pradeep Angne Mr. D. R. Rao Rane Mr. Jagdish Dhanu Mr. Raju Deshmukh Mr. Mahesh Waghela Mr. Vijay Kuveskar Mr. Dhanpat Singh	First



### The First Rajashri Tandon Award

CIFE was awarded the First Rajashri Tandon award among all the ICAR Institutes for its commendable work in bringing out various manuals and books in Hindi and thereby promoting Hindi language. The award was received by Dr. S.A.H. Abidi, Director, CIFE at ICAR, New Delhi on 18 October 1999.

# HONOURS AND AWARDS



Dr. S. D. Singh was adjudicated the Man of the Year 1999 by the American Biographical Institute, North Carolina, U.S.A.

Dr. S. D. Singh was selected as one among 2000 Outstanding Intellectuals of 20<sup>th</sup> Century" by International Biographical Centre, Cambridge, England.



Dr. (Mrs.) Neelam Saharan, Senior Scientist, received the Fertiliser Association of India Dhiru Morarji Memorial Award for the best article in Agricultural Sciences 1998-99 on 9 December, 1999 at New Delhi.



The Training and Information Division Aquaculture Department of the South East Asian Fisheries Development Centre, Tigbauan, Iloilo, Philippines presented the following awards to Dr. Bharat. S. Sontakki during the Phase II of 1<sup>st</sup> Session of the Third Country Training Programme on Responsible Aquaculture Department on 10 March 2000

The Best Paper Award in recognition of his paper entitled Small scale Shrimp (*Penaeus monodon*) Hatchery Management as an alternative livelihood for the fishes of Oumated Barangay of Aklan Province in the Philippines

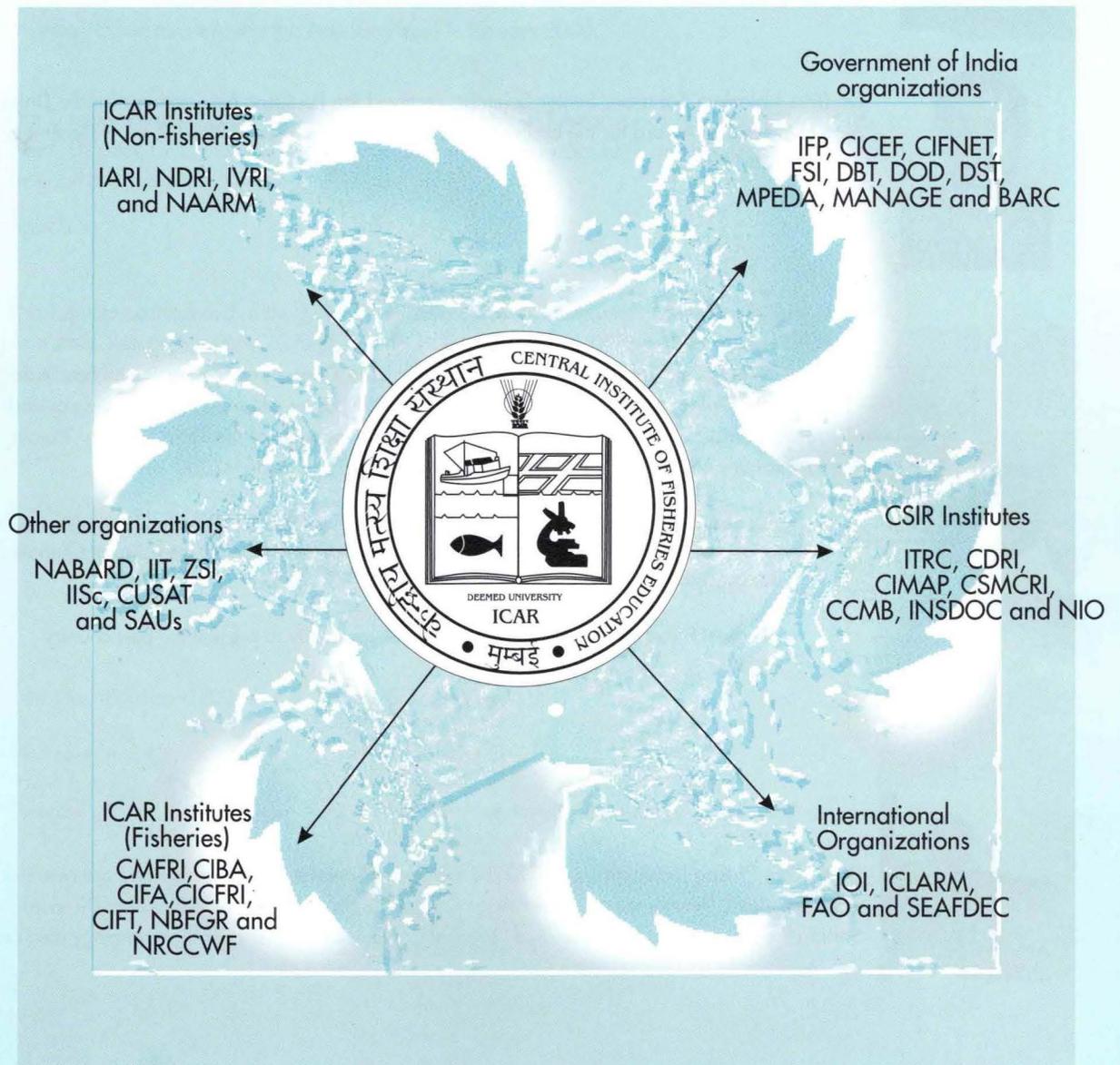
The Best Presenter Award in recognition for his ability to present the best country report.



Dr. K. Pani Prasad, Scientist was conferred the Young Scientist Award for his original research work entitled " Development of Latex Agglutination Kit for diagnosis of White Spot Diseases in Shrimps" by the organizers of the First National Conference on Fisheries Biotechnology held on 4-5 March, 2000 at CIFE.

# 8. LINKAGES AND COLLABORATION IN INDIA AND ABROAD INCLUDING EXTERNALLY FUNDED PROJECTS

## 8.1 LINKAGES



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## 8.2 EXTERNALLY FUNDED PROJECTS

1. Microflora Associated with Histamine Formation and Histamine Decomposition (A.P. Cess Funded).
2. Standardization Techniques of Multiple Carp Spawning and Seed Production on Commercial Basis in Semi-Arid Eco Region of Haryana (A.P. Cess Funded).
3. Identification of New Candidate Species for Mariculture and Standardisation of Relevant Techniques (DOD Funded).
4. Laboratory and Field Culture of Edible Seaweeds along Maharashtra Coast and their Product Development for Health and Nutrition (DOD Funded).
5. Assessment of The Stock of Shellfish and Finfish Resources of The Northwest Sector of Indian EEZ (DOD Funded).
6. Harvest Technology and Catch Composition of Deep Sea Fishery Resources in the Indian EEZ (DOD Funded).
7. Assessment of Environmental Parameters and The Marine Living Resources (Primary And Secondary) in the Indian EEZ and the Role of Myctophid Fauna in the Mesopelagic Habitat (DOD Funded).
8. Studies on Deep Scattering Layer (DOD Funded).

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# 10. LIST OF APPROVED ON-GOING PROJECTS

1. Studies on some of the Demersal Fishery Resources off Maharashtra Coast.
2. Population Genetics of *Penaeus monodon*.
3. Value added Products from Low Cost Fish by Modern and Improved Conventional Methods.
4. Screening, Characterization and Evaluation for Feeding Stimulants and Flavour Attractants.
5. Studies on Fingerprinting and RFLP Profiles of Commercially Important and Endangered Fish Species.
6. Indigenous Knowledge Systems and Socio-Economic Status of the Coastal Fisherfolk of Maharashtra.
7. Mapping of Biotoxins in Marine Cnidarians and Coniids and Evaluation of their Beneficial Properties.
8. Development and Refinement of Technology Package for Tissue Culture, Indoor and Outdoor Culture of Selected Food Value Seaweeds and their Product Development for Health and Nutrition.
9. Fish Stock Assessment And Management of Some Demersal Resources Off Maharashtra Coast.
10. Testing the Suitability of Netting Materials for Gears and Development of a Laboratory Model for Field Use.
11. Trial on Cage Culture of Commercially Important Fishes in Open Waters of Lonavla.
12. Somatic and Gonadal Development of Brackishwater Finfish, Cultivated off Mumbai Coast.
13. Comparative Evaluation of the Extent of Impact of Agriculture/ Industry/ Fisheries and Aquaculture on the Coastal Aquatic Ecosystems in Selected Study Area (Safale and Alibaug) in Coastal Maharashtra.
14. Standardization of Technique for Commercial Seed Production of Freshwater Prawn using Inland Saline Water.
15. Mapping of Biodiversity along Mumbai Coast with Special Reference to Pollution.

## EXTERNALLY FUNDED PROJECTS

1. Microflora Associated with Histamine Formation and Histamine Decomposition (A.P. Cess Funded).
2. Identification of New Candidate Species for Mariculture and Standardisation of Relevant Techniques (DOD Funded).
3. Laboratory and Field Culture of Edible Seaweeds along Maharashtra Coast and their Product Development for Health and Nutrition (DOD Funded).
4. Assessment of The Stock of Shellfish and Finfish Resources of The Northwest Sector of Indian EEZ (DOD Funded).
5. Harvest Technology and Catch Composition of Deep Sea Fishery Resources in the Indian EEZ (DOD Funded).
6. Standardization Techniques of Multiple Carp Spawning and Seed Production on Commercial Basis in Semi-Arid Eco Region of Haryana (A.P. Cess Funded).
7. Assessment of Environmental Parameters and the Marine Living Resources (Primary and Secondary) in the Indian EEZ and the Role of Myctophid Fauna in the Mesopelagic Habitat (DOD Funded).
8. Studies on Deep Scattering Layer (DOD Funded).

# 11. PARTICIPATION OF FACULTY IN CONFERENCES, MEETINGS, WORKSHOPS, SEMINARS, SYMPOSIA ETC.

## PARTICIPATION OF FACULTY IN CONFERENCES, MEETINGS, WORKSHOPS, SEMINARS, SYMPOSIA, ETC.

National Conference on Vocationalisation of Education : Perspectives for the New Millennium, Central Institute of Vocational Education ( Bhopal), New Delhi , (4-6 April 1999)	Dr. R.S. Biradar, Principal Scientist
IX Research Council Meeting of NIO, Goa (16 April 1999)	Dr. S.A.H. Abidi, Director
Seminar cum-workshop on Freshwater Prawn Cultivation Katihar, Bihar (23 April, 1999)	Mr. A.K. Reddy, Technical Officer
Workshop on Light weight Composite Sandwich Structure for the Boat Building and Transportation Industry, RV-TIFAC Composite Design Centre, Bangalore ( 28 April-2 May, 1999)	Dr. (Mrs.) Latha Shenoy, Senior Scientist
DOD Meeting, New Delhi ( 11 May, 1999)	Dr. S.A.H. Abidi, Director
Meeting of the ICAR Regional Committee No. I, Srinagar (15 May, 1999)	Dr. S.A.H. Abidi, Director
Meeting with the Secretary, Fisheries, U.P. Govt. on transfer of land in favour of CIFE (18 May, 1999)	Dr. S.A.H. Abidi, Director
Seminar on Biotechnological Applications : Relevance to the Indian Farmer, Pune, (20-21 May, 1999)	Dr. Aparna Chaudhari, Scientist and Dr. Srinivas Jahageerdar, Scientist
Board of Examination Meeting, Pusa ( 31 May 1999)	Dr. S.A.H. Abidi, Director
Eighth National Symposium on Environment, Indira Gandhi Centre for Atomic Research, Kalpakkam /Meenakshi College for Women, Chennai (22-25 June 1999)	Dr. C.S. Purushothaman, Principal Scientist
Meeting of the Governing Body and Annual General Meeting of ICAR Society, New Delhi (16 July 1999)	Dr. S.A.H. Abidi, Director
Meeting of the Interview Board of CSIR, New Delhi (26 July, 1999)	Dr. S.A.H. Abidi, Director
Meeting for Finalizing EFC of CIFE, Mumbai at ICAR, New Delhi (27 July 1999)	Dr. S.A.H. Abidi, Director Dr. R.S. Biradar, Principal Scientist
National Seminar on Fish and their Environment, Kashmir University, Srinagar (J.K.) (26-27 July 1999)	Shri R.K. Langer, Technical Officer
Workshop on Development of Sustainable Management Practices in Shrimp Farming Bhubaneswar (30- 31 July 1999 )	Mr. A.K. Reddy Technical Officer

Fourth Task Force Meeting of the Group Working on Environmental Studies of the DOD-MCR Programme, Regional Centre of NIO, Kochi (4 August 1999)	Dr. C.S. Purushothaman, Principal Scientist
National Seminar in Hindi on Rajbhasha Prabandhan, Central Institute of Fisheries Technology, Kochi (18-19 August, 1999)	Shri. Pratap Kumar Das, Technical Officer
Workshop on the Application of Food Quality and Safety Measures, Including HACCP Principles in the Food Industry, Kohinoor hotel, Mumbai (2 September, 1999)	Dr. S. Basu, Senior Scientist
Meeting of the Director's of ICAR Institutes, ICAR, New Delhi (7-8 September, 1999)	Dr. S.A.H. Abidi, Director
Hindi Workshop, Mumbai (21 September, 1999)	Shri. P.K. Das, Senior Translator and Ms. Revati Dhongde, Hindi Translator
Hindi Workshop, CICFRI, Barrackpore (20-21 September, 1999)	Dr. S.A.H. Abidi, Director
National Project Advisory Committee on Development of Potential Drugs from the Sea, CDRI, Lucknow (29-30 September and 1 October, 1999)	Dr. S.A.H. Abidi, Director
National Seminar in Hindi, Barrackpore (September, 1999)	Dr. S.A.H. Abidi, Director
Working Group Meeting on Identification of Occupation in Fisheries, Skills Required and Syllabi to Develop these Skills for Development of National Vocational Qualification, PSSCIVE, Bhopal (11-14 October, 1999)	Dr. S. Basu, Senior Scientist Dr. (Ms) Kiran Dubey, Senior Scientist and Dr. Chandra Prakash, Technical Officer
National Workshop on Vocational Qualifications in Fisheries, PSSCIVE, Bhopal (11-13 October, 1999)	Dr. (Mrs.) Latha Shenoy, Senior Scientist
IJSC Meeting of ICAR, Goa (13-14 October, 1999)	Dr. S.A.H. Abidi, Director
IAUA, Executive Council Meeting, ASRB, New Delhi (15 October, 1999)	Dr. S.A.H. Abidi, Director
Brain storming Meeting for Agricultural Human Resource Development on (AHRD) project phase II, IARI, New Delhi (16 November, 1999)	Dr R.S.Biradar, Principal Scientist
EFC Meeting, ICAR, Krishi Bhavan, New Delhi (18 November, 1999)	Dr R.S.Biradar, Principal Scientist
Workshop on Rajbhasha Karyanyan Uplabhdhiyan aur Akankshayen, NAARM, Hyderabad (29-30 November, 1999)	Shri. R.P. Uniyal, Assistant Director (Official Language )
National Workshop on Doubling Inland Fish Production by 2020, CICFRI, Barrackpore (November, 1999)	Dr. M.P.Singh Kohli, Director Incharge



AHRD Phase II Meeting, World Bank, New Delhi ( 6 December, 1999)

Dr R.S.Biradar,  
Principal Scientist

International Symposium on Agricultural Education in the Next Millennium, , New Delhi (9-11 December, 1999)

Dr. M.P.Singh Kohli, Director Incharge,,  
Dr. R.S. Biradar, Principal Scientist,  
Dr. A. D. Diwan, Principal Scientist &  
Dr.(Mrs.) Latha Shenoy, Senior Scientist

Seminar for Women Executives on Enhancing Competitive Edge in Women Executives, National Academy of Integrated Management and Training, New Delhi, (9-10th December 1999)

Dr. (Mrs.) Ratna Tewari,  
Senior Scientist

Workshop on Scientific and Technical Publishing Ink on Paper and Electrons in Cyberspace, Tata Energy Research Institute, New Delhi. (14th - 17th December 1999)

Dr. Bharat S. Sontakki,  
Senior Scientist

National Symposium on Eco-friendly Management of Resources at CICFRI, Barrackpore ( 22nd December, 1999)

Dr. M.P. Singh Kohli, Director Incharge  
and Dr. U.K. Maheshwari, Sr. Scientist

Asian Fisheries Forum at Central Institute of Freshwater Aquaculture, Bhubaneswar (17-19 January, 2000)

Dr. M.P. Singh Kohli,  
Director Incharge

Hindi Workshop, NAARM, Hyderabad (18-22 January, 2000)

Shri. B. L. Kokulla, Assistant,  
Shri. N. Gopalan, Assistan

Task Force Meeting of the Group Working on Environmental Studies of the DOD-MCR Programme, Regional Centre of NIO, Kochi (4 August 1999)

Dr. C.S. Purushothaman,  
Principal Scientist

National Conference of the Association of Microbiologists of India, CIFA, Bhubaneswar (22 - 25 January, 2000)

Dr. S.C.Mukherjee,  
Director Incharge

International Workshop on Subtle Issues in Coastal Management, IIRS, Dehradun, 3-4 February, 2000.

Dr R.S.Biradar,  
Principal Scientist

International Conference on Probing in Biological System, Institute of Science, Mumbai. (11 February, 2000)

Dr. S.C.Mukherjee,  
Director Incharge

International Conference on Managing Natural Resources for Sustainable Agricultural Production in the 21st Century, IARI, New Delhi (14-18 February, 2000)

Dr. (Mrs. ) Neelam Saharan,  
Senior Scientist

National Seminar on Popularisation of Fisheries, Dairying, Poultry and Piggery Vocational Courses, Dairy Sciences Institute, Mumbai (16-18 February, 2000)

Dr.(Mrs.) Latha Shenoy, Senior Scientist,  
Dr.(Ms) Kiran Dubey, Senior Scientist  
and Dr. S. Basu, Senior Scientist

Biodiversity and Conservation of Aquatic Resources With Respect to Threatened Fish Mahseer, MPCST Bhopal, (26-27 February, 2000)

Dr. M.P.Singh Kohli, Principle Scientist  
Dr. Somdutt, Scientist (SS) and  
Dr. V. G. Dubey, Technical Officer

High Powered Advisory Committee Meeting, ICAR Headquarters, New Delhi (1 March, 2000)

Dr. S.C.Mukherjee,  
Director Incharge

Selection Committee Meeting of West Bengal University of Veterinary and Fisheries Sciences, Calcutta (2 March, 2000)

Seminar on Bhartiya Krishi Mein Anusandhan Krantiya, CSSRI, Karnal (6-7 March, 2000)

State level Workshop on Self-employment Generation in Maharashtra, Mumbai (10 March, 2000)

State level workshop on Self-employment Generation in Maharashtra, Sahyadri Guest House, Mumbai (10 March, 2000)

ASRB Meeting, Delhi (28th March, 2000)

Meeting of FAO, NACA Joint Programme Formulation Mission Regional Programme on Aquaculture for Sustainable Rural Development, Krishi Bhavan, New Delhi

Dr. S.C. Mukherjee,  
Director Incharge

Dr. K.K. Jain, Senior Scientist and  
Dr. S. Raizada, Scientist (SS)

Dr R.S. Biradar,  
Principal Scientist

Dr R.S. Biradar,  
Principal Scientist

Dr. S.C. Mukherjee,  
Director Incharge

Dr. G. Venugopal,  
Senior Scientist

## HUMAN RESOURCE DEVELOPMENT

### Participation of faculty in training programmes in India

National Training Programme on Tissue Culture and Related Techniques for Livestock Improvement, National Dairy Research Institute, Karnal (23 March-9 April 1999)

Dr. Sanjay Jadhao,  
Scientist

Summer School entitled Marine Fishery Resource Assessment and Management CMFRI, Kochi (24 May - 22 June, 1999)

Mrs. Fatima Rizvi,  
DOD SRF

Crab Breeding and Culture, Central Institute of Brackishwater Aquaculture, Chennai (21-26 June, 1999)

Shri. Suryakant Patil,  
Scientist

Shrimp Diseases and Health Management, Central Institute of Brackishwater Aquaculture, Chennai (17-28 August, 1999)

Shri. R.P. Raman,  
Scientist

Second National Training Programme on Setting up internet and intranet using Linux operating system CIRG, Makhdoom, Mathura (U.P.) (3-13 August, 1999)

Mrs. Rama Sharma, Tech. Officer and Ms  
Rajani Pagare, Tech. Asstt

Management Development on Government Finance, National Institute of Financial Management, Faridabad (23 August- 03 September, 1999)

Shri. S. K. Pathak,  
Finance and Accounts Officer

Training on Development of DNA markers using minisatellite associated sequence amplification, National Institute of Immunology, New Delhi (6-26 September, 1999)

Dr. Aparna Chaudhari,  
Scientist

Advances in Fish Immuno-diagnostics, CIFE, Mumbai  
1-30 November, 1999)

Shri. R.P. Raman,  
Scientist

Integrated coastal Zone Management,  
College of Fisheries, Mangalore  
(8 -18 January, 2000)

Dr. S. Datta,  
Scientist

CAS Training Programme on Web Page Designing and  
Information System on Internet, IASRI, New Delhi  
(7-26 February, 2000)

Dr. Srinivas Jahageerdar,  
Scientist

Hands-on Training on Microsatellite Markers in Genome  
Diversity, CCMB, Hyderabad (22 February-5 March, 2000)

Dr. Aparna Chaudhari,  
Scientist

International Training Workshop on Methodologies for  
Assessment of Biodiversity of Mangrove, Estuary and  
Marine Ecosystem, CAS in Marine Biology, Annamalai  
University, T.N. (2-16 March, 2000)

Dr. Ashok Kumar Jaiswar,  
Technical Officer

Hands-on Training on ArcView GIS at NIIT organised by  
ESRI-India, Mumbai  
8-9 June 1999

Mr. Dasari Bhoomaiah, Technical Officer  
and Mrs. Madhavi Pikle,  
Computer Programmer

Web Application Developer, WINTECH, Mumbai  
September 1999 - January 2000(part-time)

Mr. Dasari Bhoomaiah, Technical Officer  
and Mrs. Madhavi Pikle,  
Computer Programmer

## Higher Degrees awarded

Shri. Ashok Kumar Jaiswar, Technical Officer	Ph. D, Zoology	Mumbai University,	Intertidal Biodiversity with Reference to Mollusca in and around Mumbai.
Shri. Sudhir Raizada, Scientist	Ph. D, Zoology	Dr. B.R. Ambedkar University, Agra	Effects of Certain Common Leather Dyes on the Haematology of a Common Teleost, <i>Clarias batrachus</i>
Shri. P.P. Srivastava, Technical Officer	Ph. D, Zoology	Purvanchal University, Jaunpur	Studies of the Carpet Industry Effluents on the Serum Calcium and Inorganic Phosphate Levels and Correlative Changes in Certain Glands, Tissues and Growth of a Teleostian Fish

### Participation of faculty in training programmes abroad

Dr. Bharat Sontakki, Scientist(SS) participated in  
Third Country Training Programme on Responsible  
Aquaculture Development, SEAFDEC, Iloilo City,  
Philippines,  
(18 January-18 March, 2000)



## 12. WORKSHOPS/SEMINARS ORGANISED

### Workshop on Broad Subject Matter related to Fish and Fishery Sciences

A two-day workshop on Broad Subject Matter related to Fish and Fishery Sciences was organised at the Institute's campus on 7-8 May, 1999 which was presided over by Dr. S.L. Mehta, DDG(Edn.), ICAR, New Delhi. The main objective of the programme was to redefine and restructure the PG courses as per the ICAR guidelines so as to meet new challenges and requirements of the next millennium. Besides the BSM Committee members, the other dignitaries present were from various fishery institutes of ICAR and fishing industry. Dr. Mehta in his inaugural address complimented Dr. Abidi for all his endeavours in maintaining stamp of quality of Fisheries Education at CIFE, Mumbai. for drafting uniform curriculum in Fishery Sciences at PG level. He spelt out the broad guidelines and expectations of ICAR in this matter. He emphasized the importance of skill development and entrepreneurship in drafting the PG curriculum. Master courses in five disciplines of fisheries were identified and broad course curriculum was drawn up during the workshop.

### Summer School on Hatchery and Grow-out Technology of Giant Freshwater Prawn



A Summer School on Hatchery and Grow-out Technology of Giant Freshwater Prawn was organised at CIFE, Mumbai from 3 June to 2 July 1999. This programme was sponsored by the Education Division of the Indian Council of Agricultural Research, New Delhi. The inaugural function of this summer school was held on 3 June 1999. Dr. (Mrs.) Mariamma Varghese, Vice Chancellor, SNDT Women's University, Mumbai was the Chief Guest while Shri P.K. Srivastava, Chairman, Shipping Corporation of India presided over this function.

The programme was planned with the objectives of familiarizing the participants with hatchery and grow-out technology of giant freshwater prawn, developing their skills in the operation of hatchery and demonstrating them in various larval rearing techniques. The faculty for the programme included both internal as well as external guest faculty drawn from the college of Fisheries, Mangalore; National Bank for Agriculture and Rural Development (NABARD); etc.

A total of 17 candidates representing ICAR Institutes, State Agricultural Universities, State Departments of Fisheries, the MPEDA, etc. participated in the programme.

The valedictory function of the programme was held on 2 July, 1999 in which Dr. M.D. Zingde, Deputy Director and In-charge, Mumbai Regional Center of National Institute of Oceanography was the Chief Guest and Dr. S.D. Tripathi, Ex- Director, CIFE was the Guest of Honour.

## Short Course on Computer Applications In Fisheries

A Short Course on Computer Applications in Fisheries was organized at the Institute from 6-15 July, 1999. This programme was sponsored by the Education Division of the ICAR, New Delhi. Mr. M.Moni, Senior Technical Director, National Informatics Center, New Delhi was the Chief Guest on the inaugural function which was presided over by Dr. S.A.H. Abidi, Director, CIFE, Mumbai.

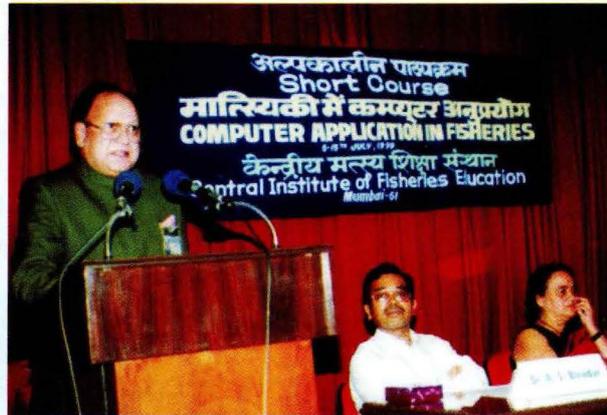
The short course was planned with the objectives of familiarizing the participants with the basic concepts of computer hardware and software and developing their skills in the use of the packages like Microsoft (MS) Word, MS Excel, MS Power Point and Multi-media techniques. The curriculum was packed with a series of theory lectures, practical, demonstrations and practical exercises on the above packages besides Remote Sensing, Geographical Information Systems and their applications, in fisheries computerization of taxonomic information, use of E-mail and internet, etc. The faculty for the programme included both internal as well as external guest faculty drawn from NIC, New Delhi; Center for Cellular and Molecular biology, Hyderabad and Space Application Center (ISRO), Ahmedabad.

A total of 25 candidates representing ICAR Institutes, State Agricultural Universities, other conventional universities and Fishery Survey of India participated in the programme.

For the first time in the history of CIFE, Mumbai the CD version of the course manual was prepared and released during the valedictory function of the programme by the Chief Guest Dr. (Mrs.) Suma Chitnis, Director, J.N. Tata Endowments, Mumbai. This CD version of the course manual is prepared in HTML format which can be accessed through web browsers like Internet Explorer, Netscape, etc. It is menu driven and userfriendly.

## Meeting of the High Powered Committee of ASRB:

A meeting of the High Powered Committee of the Agricultural Scientists Recruitment Board (ASRB) was convened at CIFE, Mumbai on 23 September 1999, under the Chairmanship of Dr. Kirti Singh, Ex-Chairman, ASRB. Other members of this committee were Dr. A. G. Sawant, Member, ASRB; Dr. K. V. Devaraj, Retd. Vice-Chancellor, UAS, Bangalore; Dr. K. Pradhan, Retd. Vice-Chancellor, Rajasthan Agricultural University, Bikaner and Shri K. K. Bajpai, Secretary, ASRB. The objective of this meeting was to streamline the Agricultural Research Service vis-à-vis identification and incorporation of new disciplines in the area of fisheries. Representatives of ICAR Institutes and Fisheries Colleges of the Western region of India participated in this meeting.



### First National Conference on Aquatic Biotoxins

The First National Conference on Aquatic Biotoxins was organised at Lucknow on 25 and 26 October, 1999, jointly by CIFE, Mumbai and Industrial Toxicology Research Center, Lucknow. Prof.D. Schiffman, Dept. Biological Sciences, University of Rostock, Germany was the guest of Honor who inaugurated the Conference. Dr. P. K. Seth, Director, ITRC, welcomed the gathering and Dr. R.C. Srimal gave the Key Note Address. Vote of Thanks was proposed by Mr. K. Venkateshvaran, Scientist (SS), Coordinator, CIFE. A total of 22 papers were presented at the conference.



### National Conference on Fisheries Economics, Extension and Management

A National Conference on Fisheries Economics, Extension and Management was organised at Mumbai on 5-6 Jan 2000. The conference was inaugurated by the renowned Economist, Dr. K.S. Parikh, Vice Chancellor, Indira Gandhi Institute of Development Research, Mumbai and Dr. K. Gopakumar, D.D.G (Fisheries ), ICAR was the Guest of Honour. Five eminent scientists in the field viz Dr. B. S.Saxena, Prof. P.S.Rao, Dr. K.K.P. Panikkar, Prof. H.G.Hingorani and Prof. K.K.Ghosh were honoured for their life time contribution in the field of Fisheries Economics, Extension and Statistics.

The major recommendations of the conference were, development of a fish marketing policy, augmenting fisheries finances, organising multipurpose Cooperatives in fisheries, conducting impact assessment studies of field training programmes for continuous monitoring and evaluation of FFDA's, augmenting entrepreneurship to strengthen backward and forward linkages in fisheries, special training programmes for fisherwomen, supporting NGOs for augmenting people's participation and decentralizing coastal management through panchayats, etc.

### National Workshop on Aquaculture of Freshwater Prawns



A National workshop on Aquaculture of freshwater prawns was organised on 8-9 February.2000, at Nellore, A.P. by CIFE in association with the College of Fishery Science, Acharya N.G.R. Agricultural University, A.P. and the Marine Products Export Development Authority, Kochi. The workshop was inaugurated by Dr. S. Venugopalachari, Hon'ble M.P. of Lok Sabha. Sixty-five papers were presented in the workshop. 200 delegates and 250 farmers from Punjab, Haryana, M.P., Maharashtra, Gujarat, West Bengal, Kerala, Karnataka, Tamil Nadu and Andhra Pradesh participated in the deliberations. Fourteen eminent scientists and stalwarts from the field of freshwater fish and shellfish breeding and culture were felicitated on the occasion for their immense contributions.

The workshop was followed by a five day training programme on Hatchery and Grow-out technology of Giant Freshwater Prawn from 10 to 14

February 2000. Seventy prawn farmers from different states participated in the programme and discussed various aspects of aquaculture in the country

### First National Conference on Fisheries Biotechnology

The first National Conference on Fisheries Biotechnology was held on 4-5 March, 2000 at CIFE, which was inaugurated by Hon'ble Shri Hukam Dev Narayan Yadav, Union Minister of State for Agriculture. On this occasion three leading scientists, Dr. T.J.Pandian., Dr. P.Das and Dr. K.K.Rishi were felicitated for their contributions in the field of genetic engineering and biotechnology. On this occasion a Young Scientist Award was instituted which was bagged by Dr. K. Pani Prasad, Scientist, CIFE for his original research work on "Development of Latex Agglutination Kit for diagnosis of white spot diseases in shrimps".



### National Seminar on *Lavniya Mridha Ka Jalkrishi Hetu Upyog*

National Seminar on *LAVNIYA MRIDHA KA JALKRISHI HETTU UPYOG* was jointly organised by CIFE and Maharshi Dayanand University, Rohtak on 23-24 March, 2000 at Rohtak (Haryana) which was inaugurated by Dr.S.A.H.Abidi, Hon'ble Member, ASRB New Delhi. Other dignitaries present in the inaugural session were Dr. S.D. Tripathi, Former Director, CIFE, Dr.S.C. Mukherjee, Director Incharge, CIFE, Shri M.L. Jain, IAS, Secretary, Fisheries & Finance, Haryana, Shri Ashok Khemka, IAS, Registrar, M.D. University. In all, fifty seven papers were presented in the seminar. An exhibition was also organised on the occasion for the fish farmers of Haryana and Punjab. About 200 delegates and 75 farmers participated in the seminar. The presentation of papers and deliberations were done in Hindi which generated lot of interest among the farmers and entrepreneurs who attended the seminar. Two retired scientists of CIFE, Prof. M.L. Rustogi and Prof S.D. Mitra who had contributed substantially for the development of the Centre, were felicitated on the occasion.

# 13. DISTINGUISHED VISITORS

Dr. Gerrit Hoogenboom,  
Department of Biological and Agricultural  
Engineering, University of Georgia, Georgia, USA.  
(7 April 1999)

*I was impressed by the interest of the faculty, staff and students in the latest information technologies. I hope that these can be implemented when CIFE grows to be one of the centres in fisheries education in the world.*

Prof. Daniel Dutkiewics,  
Prof. Edward Kolakowski and Prof. Piotr Byokowski  
(Polish Delegation)  
(15 April 1999)

*We are extremely happy with our visit to this prestigious institute. I wish you all the very best.*

Prof. (Dr.) Gadekar,  
Vice-Chancellor,  
Babasaheb Bhimrao Ambedkar University,  
Lucknow.  
(23 April 1999)

*I am impressed by the progress and development of CIFE under the dynamic leadership of Dr. S. A. H. Abidi with the help of faculty members. I wish all success. I was also happy to address the faculty and deliver the lecture.*

Prof. H.A. Varghese,  
Vice-Chancellor,  
S.N.D. T Women's University, Mumbai.  
(3 June, 1999)

*I am impressed by the development made by CIFE on the occasion of the Summer School on Hatchery and Grow-out Technology of Giant Freshwater Prawn. Dr. Abidi has given dynamic leadership which marks the progress of the pioneer University. I wish CIFE all success under Dr. Abidi's leadership.*

Shri P.K. Srivastava,  
CMD, Shipping Corporation of India, Mumbai.  
(3 June, 1999)

*Institutes of this type are the need of the country in its march towards overall growth and ambition to secure vital food security. I am greatly impressed by the range of activities provided here and feel confident that the dynamic leadership of Dr. Abidi will take this Institute to even higher levels of international standards. All the best from me and SCI.*

Mr. Emma Dodsworth,  
HTS, Innovation Centre,  
York Science Park, University Road,  
York, YO105DG, UK.  
(6 July, 1999)

*I am extremely impressed with this facility. The*

*tour round was very much appreciated and interesting. The training you provide is very comprehensive, excellent work is being done. Thank you for such an informative visit. I hope to contact you and work with you in future.*

Mr. David Mc Cormicu,  
HTS, Perth, Australia,  
9 Bussell RD: Wembley, Downs.  
(6 July, 1999)

*Extremely interested and really impressed with the management of the Institute. We will no doubt work with you again in the near future.*

Dr. M. Moni,  
Senior Technical Director,  
National Informatics Centre, New Delhi  
(7 July, 1999)

*Useful visit to me. Pleased to work with CIFE, on joint venture projects on Informatics. Really impressed by the dynamism of faculty members of CIFE. Under the dynamic leadership of Dr. Abidi, I hope, CIFE will reach its professional height.*

Dr. Anil Kakodkar,  
Director,  
BARC, Mumbai  
(12 August, 1999)

*I am very happy to be here and get to know the activities and the programmes at CIFE. My compliments to all members of this fine institute.*

Prof. Sher Ali,  
Chief of Molecular Genetics Laboratory,  
National Institute of Immunology,  
New Delhi  
(18 August, 1999)

*I am highly impressed. I wish the institute all the best.*

Dr. S.R. Hashim,  
Member, Planning Commission, New Delhi  
(25 August, 1999)

*This was my second visit to this Institute and the Institute, during these two years since my last visit, has progressed remarkably well both in pursuits of its research and training programmes and in upkeep of the building and the facilities. I really admire the leadership given by its Director, Dr. S.A.H. Abidi. The Institute needs more space urgently and also a ship and related facilities. Fishery is one of the most important and most promising sector of development and this Institute can play a critically important role in realising the full potential of development. I am very happy with this visit.*

## DISTINGUISHED VISITOR

Dr. Swe Thwin, Professor,  
Dept. of Marine Science,  
University of Mawlamyine, Myanmar  
(17 September, 1999)

*I am very happy to see the development and the progress in the academic programmes and research capabilities of CIFE on my second visit, fifteen years after the first. I look forward to future co-operation between our two Institutes in the coming millennium.*

Dr. Htay Aung,  
Department of Marine Science,  
University of Mawlamyine, Myanmar  
(23 September 1999)

*This renowned institution is found to be equipped with advanced instruments, and set up with scientists of various marine science field. It is very kind of this department to welcome the Myanmar delegation with warm hospitality.*

Dr. Kirti Singh,  
Ex-Chairman (ASRB) and Secretary,  
National Academy of Agricultural Sciences, Pusa,  
New Delhi  
(23 September, 1999)

*It is always a great pleasure to visit this institute. Every time I find new development and improvement in the teaching and research activities including infrastructure under the dynamic leadership of Dr. Abidi. I wish a bright future for the institute.*

Dr. K. V. Devaraj,  
Former Vice-Chancellor,  
University of Agricultural Sciences, Bangalore.  
(23 September, 1999)

*It is my pleasure to visit this esteemed Institute in fisheries presently under the leadership of Dr. Abidi. Every visit makes me to express my appreciation in view of the fast development that is exhibited in this Institute. I wish all the best to this Institute for the future upliftment of fisheries education.*

Dr. A.G. Sawant,  
Member, ASRB,  
New Delhi  
(23 September, 1999)

*It was a matter of great pleasure to visit CIFE during the meetings of the High Power Committee today. The Institute has well furnished laboratories coupled with good communication system and the computer room. The hospitality of the staff is excellent.*

K.K. Bajpai,  
Secretary, ASRB,  
New Delhi.  
(23 September, 1999)

*It has been a pleasure to visit the institute after a gap of six years and see the change in the environment. The growth and consolidation is remarkable. My best wishes.*

Hon'ble Justice G. Ramanujan,  
Chairman, Aquaculture Authority, New Delhi  
(25 September 1999)

*I had the good fortune of visiting the various departments of this Institute and had the first hand knowledge of all the activities carried on here. I heartily congratulate the Vice-Chancellor of this Institute for the efficient way the administration and the course of studies carried on in this Institute. I wish this Institute a continued growth and prosperity.*

Shri Nitish Kumar,  
Union Minister for Agriculture,  
Govt. of India, Hon'ble New Delhi

(4 January, 2000)

*Athithi ke liye dhanyavad. ( Thanks for the hospitality)*

Hon'ble Shri Babul Das,  
Minister of Fisheries, Govt. of Assam.  
(22 January 2000)

*Today I have visited all the departments of this institute. It is the best Institute of Fisheries within the country. I am very much pleased to see the Institute. The scientists of this Institute are doing noble works in the field of fishery. I hope the contribution made by CIFE in the field of fisheries will generate a new era in the new millennium. I congratulate the Director and all the academicians and all the staff for offering me a chance to visit this renowned Institute.*

Hon'ble Shri Hukum Dev Narain Yadav,  
Minister of State for Agriculture,  
Govt. of India, New Delhi  
(4 March, 2000)

*I wish the Institute all the best.*

# 14. OTHER ACTIVITIES

## INFRASTRUCTURAL DEVELOPMENT

The development of infrastructural facilities has been taken up with greater pace to provide facelift to the old buildings and renovation of the laboratories, lecture halls, etc.



Dr. K.R. Prasad, President, Scientific Advisory Board inaugurated the recently modified "Model Shellfish Hatchery Unit" and "Meenagruha" at Kakinada Centre of CIFE.

A newly developed Biochemistry Laboratory at the Institute was inaugurated by Dr. S.L. Mehta, DDG (Education), ICAR, New Delhi on 24 April, 2000



A newly developed Center for Molecular Genetics and Biotechnology at CIFE, Mumbai was inaugurated by Dr.S.A.H. Abidi, Ex- Director, CIFE, and presently Member (Animal Sciences), ASRB, New Delhi; on 20 November 1999. The new laboratory is well- equipped to carry out research and training in fish molecular genetics, tissue culture and gene banking.

A peer to peer computer network was established at the Computer Laboratory of the Institute. All the heads of the divisions of the Institute were provided with necessary computers/printers for scientific data analysis, report making, Internet access, e-mail etc.

## LIBRARY SERVICES

A total of 735 new entries were added to the library collection. 33 issues of Indian journals and 201 issues of foreign journals and 9 CD-ROM were subscribed during the year. Around 56 visitors and readers consulted the library and 35 reference queries were attended. So far the library has 11 computers connected to the CD-Net.

## DOCUMENTATION SERVICES

The documentation section continued to render active support services towards external reporting of the institute's progress. The different reports/documents like monthly reports, quarterly reports, status reports/ action taken reports on the recommendations of the ICAR Regional Committees, News items for the ICAR Reporter/ News, Report for DARE, Quarterly performance review, were compiled and edited by the section. Besides bringing out the print version of the Institute's Annual Report (1998-99) a CD version of the same was also made. The section brought out a small brochure, *CIFE Indian Fisheries University*. The section also provided assistance in printing of the other publications like *Matsya Darpan*, the quarterly magazine and other occasional publications.

## COMPUTERISATION

For the first time in the history of CIFE, Mumbai the CD version of the course manual on Computer Applications In Fisheries was prepared and released during the valedictory function of the training programme on Computer Applications In Fisheries by the Chief Guest Dr. (Mrs.) Suma Chitnis, Director, J.N. Tata Endowments, Mumbai. This CD version of the course manual is prepared in HTML format which can be accessed through web browsers like Internet Explorer, Netscape, etc. It is menu driven and userfriendly.

Red Hat LINUX 6.0 server was successfully installed at the Institute and the file, mail and web server on the same were configured. Connectivity with the server as well as web browsing was checked from different nodes on the LAN network. The performance of which was found to be good. The server is kept on for 24 hours for facilitating the internet access even after office hours and maximum utilization of VSAT. Institute's webpage prepared in house in HTML was hosted on the Institute's LINUX server. The Webpage includes Mandate, location, resources, manpower activities, achievements, vision, faculty and events calendar.

#### OFFICIAL LANGUAGE IMPLEMENTATION

The past year witnessed remarkable progress in the implementation of official language. Our efforts were suitably rewarded by ICAR and CIFE was awarded the First Rajshri Tandon award. A National Seminar in Hindi on *Lavniya Mridha Ka Jalkrishi Hettu Upyog* was jointly organised by CIFE and Maharshi Dayanand University, Rohtak on 23-24 March, 2000 at Rohtak (Haryana). Two short term training programmes were organised in Hindi one on *Matsya Palan ki Adhunik Vidhi* and the other on *Matsya Parisanskaran evam Punarutpadan*. Hindi stenography training was also imparted to the staff to promote use of Hindi in all the official works. 14 September, 1999 was celebrated as - *Rajbhasha Swarna Jayanti Varsh*. On this occasion 16 staff members were given cash award for their commendable work in Hindi. Efforts are underway to start Hindi emails and set up a Hindi website. Several useful and attractive Hindi publications were brought out this year.

#### STUDENTS WELFARE ACTIVITIES

The *Tika Samaroha* was organised at CIFE, Mumbai on 2 September 1999 to bid farewell to the out-going students. In the same function, the students admitted for the fresh batches of academic programmes of the year 1999-2000 were given a warm welcome. This unique ceremony is being conducted at CIFE, Mumbai, every year since 1996. Dr. K. Venkatesh, IPS, Deputy Commissioner of Police, Mumbai was the Chief Guest on this occasion which was presided over by Dr. S.A.H. Abidi, Director, CIFE, Mumbai.

#### STAFF WELFARE ACTIVITIES

The Annual Day of CIFE, Mumbai was celebrated on 29 July 1999. Dr. K. Gopakumar, Deputy Director General (Fy.), ICAR, New Delhi was the Chief Guest on this occasion. Dr. S.A.H. Abidi, Director, CIFE, Mumbai presided over the function. Besides addressing the gathering Dr. K. Gopakumar distributed the prizes to the winners of various sports, literary and cultural competitions organised during the year for the students and the staff members. A cultural programme was also organised to mark the day.

#### OTHER CELEBRATIONS

In commemoration of the Golden Jubilee Year of Hindi as Rajbhasha, curtains were raised for the year long celebrations at CIFE, Mumbai on 14 September 1999. Smt. Smriti Thakur, wife of late Joint Director Dr. N.K. Thakur, was the Chief Guest on this occasion while Dr. S.A.H. Abidi, Director, CIFE, Mumbai presided over the function. The function marked the release of a series of Hindi publications by the Chief Guest Smt. Thakur. Dr. Abidi presented the incentives/prizes to the winners of various tests/competitions held in Hindi.

CIFE parivar celebrated Shri Ganesh festival with traditional fervour from 13 to 17 September 1999.

# 15. PERSONALIA

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Fax: 022-636 1573 & 022-634 8223  
e-Mail: [fishinst@bom3.vsnl.net.in](mailto:fishinst@bom3.vsnl.net.in)



16.1 List of staff (as on 31 March 2000)  
Not as per seniority  
CIFE Headquarters, Mumbai

Director Incharge  
Dr. S.C. Mukherjee

Principal Scientists (Professors)  
Dr. M.P. Singh Kohli  
Dr. A.D. Diwan  
Dr. R.C. Das  
Dr. R.S. Biradar  
Dr. R. Sathiadhas  
Dr. C.S. Purushothaman  
Dr. S.D. Singh  
Dr. W.S. Lakra

Senior Scientists/Scientists-SS  
(Associate Professors)  
Dr. Subrata Basu  
Dr. (Mrs.) Ratna Tewari  
Dr. K.K. Jain  
Dr. S.K. Chakravarty  
Dr. (Ms.) Kiran Dube  
Dr. (Mrs.) Neelam Saharan  
Dr. M.B. Iftekhar  
Dr. (Ms.) Latha Shenoy  
Dr. S.N. Ojha  
Dr. K.V. Rajendran  
Dr. A.K. Pal  
Dr. G. Venkateswarlu  
Mr. K. Venkateshvaran  
Mr. S. Raizada  
Mr. Atul Kumar Jain  
Dr. Bharat S. Sontakki

Scientists (Assistant Professors)  
Dr. Gopal Krishna Saxena (on study leave)  
Dr. (Mrs.) Aparna Chaudhari  
Mr. P.K. Pandey (on study leave)  
Dr. N.P. Sahu  
Dr. K. Pani Prasad  
Mr. S.K. Patil

Dr. S. Jahageerdar  
Dr. B.B. Nayak  
Dr. M.B. Patel  
Dr. Sanjay Jadhav  
Dr. Madesh. M.  
Mr. Shyam Salim  
Ms. Usha Rani  
Ms. Deepa Bhagat

Technical Officers T - 8  
Mr. S.K. Pal  
Mr. Nandlal Singh  
T - 7  
Mr. S. Natarajan  
Mr. A.K. Reddy

T - 6  
Mr. R.K. Langer  
Dr. Chandra Prakash  
Mr. A.K. Padmanabhan  
Dr. A.R. Warange  
Mr. Ashok Kumar Jaiswar  
Mr. R.S. Rana  
Mr. Alkesh Dwivedi  
Mr. Prem Prakash Srivastava  
Mr. R.D. Tandel  
Mr. S.G.S. Zaidi  
Ms. Rama Sharma

T - 5  
Mr. A.D. Ragabhatag  
Mr. G.K. Rao  
Mr. S.K. Pandey  
Ms. Ujwala Gadre  
Mr. M.H. Chandrakant  
Mr. D.L. Sawant  
Mr. Deepak Khogre  
Mr. Dasari Bhoomaiah  
Mr. K.P. Khalsa  
Mr. M.K. Chouksey  
Mr. Satish Kamat

Technicians T - 4  
Mr. J.P. Patil  
Mr. R.H. Rajguru  
Ms. Aravindra Mehta  
Ms. Krishnan Thilgavati  
Mr. Palaniswamy  
Ms. Nalini Poojari  
Mr. K.P. Shetty  
Mr. P.K. Das  
Mr. A.B. Birade  
Ms. Madhavi Pikle  
Mr. A. Sadanand  
Mr. P.B. Sonawane  
Ms. S.M. Bagwe

T - II - 3  
Ms. Rajani Pagare  
Mr. S.M. Shinde  
Ms. S.P. Nalawade  
Mr. Chandrakant Kareer  
Mr. J.M. Koli  
Ms. S.S. Gajbhiye  
Mr. B.G. Mandhare  
Ms. Revati Dhongde  
Ms. Rekha Nair  
Mr. R.G. Kudale  
Mr. Bhagat Singh Rawat

T - I 3  
Mr. S.V. Patil  
Mr. B.J. Rathod  
Mr. Sanjeev Bandkar

T - 2  
Mr. N.K. Aglave  
Ms. B.S. Ghagre  
Mr. Avinash Sable  
Mr. S.L. Koli  
Mr. B.T. Phande  
Mr. Baburam Jaiswar  
Mr. R.S. Pardhi (Rane)  
Mr. S.R. Vinarkar

T - 1

Mr. A. Kokane  
Mr. Arun P. Puri (Gosavi)  
Mr. A. D. Deshmukh  
Mr. Sikander Sheikh  
Mr. Dhanpat Singh

Administration & Finance  
Senior Administrative Officer  
Mr. Ravi Kumar

Finance & Accounts Officer  
Mr. S.K. Pathak

Administrative Officer  
Mr. M.K. Pachauri

Assistant Director (Official Language)  
Mr. R.P. Uniyal

Assistant Administrative Officers  
Ms. Kamala B. Menon  
Mr. K. Mahmood  
Mr. P. B. Tandav  
Mr. R. L. Mohite  
Mr. Sunil Kumar

Senior Personal Assistant (Director's  
Secretariat)  
Ms. M. Abraham

Senior Stenographer (Director's  
Secretariat)  
Ms. T. Kuruvilla

Stenographer (Director's Secretariat)  
Mr. G.S. Fernandes

Junior Stenographer  
Ms. S. R. Arutla  
Mr. P.R. Ninawe

Assistants  
Mr. S.S. Kochrekar  
Mr. T.D. Kumar  
Ms. S.S. Parab  
Ms. Valsa Pavitrana  
Mr. Y.P. Belgaonkar  
Mr. B.L. Kokkula

Senior Clerks  
Ms. N.Y. Raorane  
Mrs. Sushma Singh  
Mrs. S.R. Wadhavkar  
Mrs. S.V. Kadam  
Mrs. A.V. Shukla  
Mrs. D.S. Naik  
Mr. J.D. Chandramore

Mrs. F. Fernandes  
Mrs. Deepika Behl  
Ms. Chandrarekha S. Khundol  
Mr. R.R. Shah  
Mr. D.S. Ingle  
Mr. R.R. Kadam  
Mr. R.G. Gamare

Junior Clerks  
Mrs. Swati Koli  
Mr. Vijay Kuveskar  
Mr. Devendra Raorane  
Mrs. Sujata Pawar  
Mrs. Anagha Joshi  
Ms. Yashoda S. Dhavkar  
Mr. A.G. Kolambkar  
Mr. Bharat Kumar Chauhan  
Mrs. Sanyuja S. Parab  
Mr. Pradeep Angane  
Mrs. Chaitali Raut  
Mrs. Pragati Pawaskar  
Mrs. Anu Grover  
Mr. K.K. Jagtap  
Mr. Suresh.H. Bhosle  
Ms. Guganya  
Mrs. Smitha. K

Supporting Staff  
Grade IV  
Mr. Shantaram D. Jadhav  
Mr. S.L. Garate  
Mr. Haridas Sukhan  
Mr. A.N. Mahadik  
Mr. N.A. Bijalli  
Grade III  
Mr. B.K. Raut  
Mr. K.D. Solanki  
Mr. P.B. Jadhav  
Mr. Indersingh  
Mr. S.M. Supat  
Ms. Nalini A. Sawant  
Ms. V.D. Misale  
Mr. Madhu Wasnik

Grade II  
Mr. I.R. Solanki  
Mr. R.G. Desai  
Mr. S.V. Gawade  
Mr. Vinod P. Tiwari  
Mr. Surajbali R. Jaiswar  
Mr. B.S. Tamankar  
Mr. Ashok R. More  
Mr. Shivaji Shelke  
Mr. D.B. Gaikwad  
Mr. V.K. Bhave  
Ms. Vandana Tambe  
Mr. M.B. Waghela  
Ms. K.R. Ahire

Grade I

Mr. T.G. Gaikwad  
Mr. J.K. Makwana  
Mr. Ankush R. Dore  
Mr. Bandu R. Chavan  
Mr. M.P. Kotian  
Mr. G. Kamble  
Mr. Ashok R. Shingade  
Mr. Jagdish Namdev Dhanu  
Mr. Nandu L. Ghane  
Mr. Vasant N. Ondkar  
Mrs. Shantabai Kamble  
Mr. S.P. Malvankar  
Mrs. R. H. Chavan  
Mr. R.N. Kamble

Vessel Staff  
Engineer F.T.V. (T-8)  
Mr. Josey Jacob

Mate (T-5)  
Mr. K. Satyanarayana

Engine Driver (T-5)  
Mr. S.K. Chodankar

Additional Engine Driver (T-4)  
Mr. S.L. Kotian

T-3  
Mr. S. Maity

Engine Driver (T-2)  
Mr. K.A. Manchekar

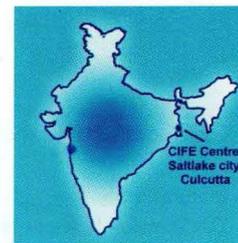
Bosun (Uncertified)  
Mr. N.M. Zhenekar

Dekhand (T-1)  
Mr. K.A. Shirogaonkar  
Mr. K.V. Rajendran  
Mr. J.N. Kolamkar  
Mr. S.L. Mungekar  
Mr. A.P. Dhawde  
Mr. V.B. Khandalgaonkar

Cook  
Mr. Kamaraju

Supporting Staff  
Mr. B.N. Sukur (Gr. IV)  
Mr. U.A. Mullaji (Gr. IV)  
Mr. M.B. Bhokse (Gr. IV)  
Mr. Ayubkhan Bijali (Gr. IV)  
Mr. G.G. Zendeekar (Gr. II)  
Mr. Vishnu Patil (Gr. II)  
Mr. Sitaram Padyal (Gr. II)  
Mr. Arvind Lavande (Gr. I)

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Fax: (033) 3573469  
CIFE Centre Calcutta



#### Senior Scientists

Dr. U.K. Maheshwari  
(Officer In-charge)  
Dr. (Ms.) Archana Sinha

#### Scientist-SS

Mr. P. K. Roy (on study leave)

#### Scientists

Dr. S. Datta  
Mr. B.N. Tiwari  
Mr. S. Kannappan (on study leave)  
Ms. Shobha Sondhia  
Dr. Parimal Sardar

#### Technical Officers (T - 5)

Mr. Rakesh Kumar (On study leave)  
Mr. P.S. Pandey  
Mr. S. K. Sharma

#### Technicians-T-4

Mr. R.K. Biswas  
Mr. A.K. Mondal

#### T-2

Mr. R.K. Mondal  
Mr. P.K. Patra  
Mr. S.K. Das, Engine Driver

#### T-1

Mr. T.K. Ghosh, Driver  
Mr. M. Satyanarayana, Driver

#### Administrative Staff

Assistant  
Mr. B. Veera Raju,

#### Jr. Stenographer

Ms. Kaberi Biswas,

#### Senior Clerk

Mrs. G. Prameela,

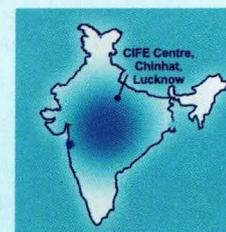
#### Jr. Clerk

Mr. P.K. De,  
Mr. C.N. Sahani,

#### Supporting Staff

Mr. G.C. Saha, Jr. Deckhand, (Auxillary)  
Mr. B. Dhar, Masalchi, Gr. (IV)  
Mr. B.L. Mahato, Cook, Gr.(III)  
Mr. B.D. Mondal, Gr. (III)  
Mr. T.C. Balmiki, Gr. (III)  
Mr. Manju Paul, Gr. (III)  
Mr. Raghunath Das, Gr. (III)  
Mr. Ram Narain Prasad, Gr.(III)  
Mr. Ramesh chawdhary Gr.(II)  
Mr. Ram Milan Singh, Gr. (I)

CIFE Centre  
Chinhat, Lucknow - 227 105  
Uttar Pradesh  
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Fax: 91-0522-315848



#### CIFE Centre Lucknow

#### Scientists-SS

Mr. A. K. Sharma (Officer In-charge)  
Mr. P. M. Sherry  
Dr. Alok Kumar Jain

#### Technical Officers, T-7

Dr. P.K. Varshney

#### T-5

Dr. C.S. Chaturvedi,  
Dr. (Ms.) Zeba Jaffar  
Mr. S.P. Singh

Mr. A.K. Yadav  
Mr.V.K. Tiwari

#### Technicians

Mr. S.K. Upadhyay, T-II-3  
Mr. Mohmood Gayas, T-2  
Mr. Baboolal, T-2

#### Administrative Staff

Assistant  
Mr. Pooranchand,  
Mr. Jogendra Singh

#### Junior. Clerk

Mr. P.K. Awasthi  
Mr. P.C. Verma

#### Supporting Staff

Mr. Narayan, Gr. (IV)  
Mr. P.C. Jaiswar, Gr. (III)  
Mr. K. Dush Raj, Gr. (III)  
Mr. Ram Bharose, Gr. (I)  
Mr. Suneet Kumar, Gr. (I)  
Mr. Ram Lakhan, Gr. (I)  
Mr. Anwar, Gr. (I)  
Mr. Sajivan Lal, Gr. (I)  
Mr. J.N. Tiwari, Gr. (I)  
Mr. Mahesh Chand, Gr. (I)  
Ms. Kamla Jai Kishore, Gr. (I)  
Mr. Vinod Kumar, (Cook)Gr. (I)



CIFE Centre  
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Madhya Pradesh  
Phone: 07574-32472  
Fax: 07574-52954



CIFE Centre Powerkheda

Scientists-SS  
Dr. Somdutt (Officer In-charge)  
Mr. S.S.H. Razvi

Technical Officers- T-6  
Mr. K.B.S. Murthy,  
Mr. V. K. Tiwari (On study leave)

T-5  
Mr. R.K. Upadhyay

Technicians-T-4  
Mr. Vijay C. Dubey

T-II-3  
Mr. L.P. Bamalia

T-2  
Mr. Gurbachan Singh

T-1  
Mr. Anup Singh

Administrative Staff  
Assistant  
Mr. J.R. Jaiswar,  
Ms. Asha Dhurve

Supporting Staff  
Grade (II)  
Mr. Hari M. Potpose,  
Mr. Lallu Prasad  
Mr. Vishnulal  
Mr. Mangali Prasad  
Mr. Surendra Kumar  
Mr. Hari Singh

Grade (I)  
Mr. Ram Kewal Prasad  
Mr. Raghuvir Prasad  
Mr. Ram Swaroop  
Mr. Manoharlal  
Mr. Shambhu Dayal  
Mr. Satyander Prajapati

CIFE Centre  
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Andhra Pradesh  
Phone: 0884-373 602  
Fax: 0884-373 602



CIFE Centre Kakinada

Senior Scientist  
Dr. G. Gopalkrishna  
(Officer In-charge)

Scientist  
Mr. R.P. Raman

Technical Officers (T-6)  
Mrs. Asha Landge

Technical Officers (T-5)  
Mr. P. Rami Reddy (On study leave)  
Mr. J. Krishna Prasad  
Mr. C.K. Sajeev  
Mr. K. Murali Mohan  
Mr. P. Sreenivasa Rao  
Mr. V.N. Acharyulu

Technicians-T-4  
Mr. J. Satyanarayana  
Mr. P. Satyanarayana  
Mr. K. Radhakrishna Reddy  
Mr. Ravi Shankar Patnaik  
Mr. B. Krishna Rao

T-II-3  
Mr. J. Krishna Prasad  
Mr. V. Abbai

T-2  
Mr. V. Das  
Mr. Shankar Lal  
Mr. K. Rangiah  
Mr. T.P. Krishna Rao  
Mr. S.S. Murthy  
Mr. Y.S. Murthy

T-I-3  
Mr. J. Satyanarayana

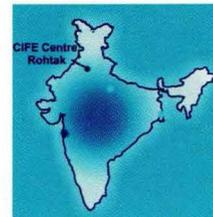
T-1  
Mr. B. Satyanarayana  
Mr. M. Satyanarayana  
Mr. P. Eshwar Rao

Administrative Staff  
Assistant  
Mr. N. Gopal,  
Mr. T. Padmavathy  
Mr. P.V.G.K. Murthy

Junior. Clerk  
Mr. B. Laxman Rao  
Mrs. M. Rama Mani

Supporting Staff  
Mr. K. Pothu Raju, Gr. (IV)  
Mr. M. Harichandra Reddy, Gr. (III)  
Mr. M. Krishna, Gr. (III)  
Mr. Sivaram Kale, Gr. (III)  
Mr. M. Gandhi Prasad, Gr. (III)  
Mr. M. Ch. Appa Rao, Gr. (II)  
Mr. K. Malliah, Gr. (II)  
Mr. K. Satyanarayana, Gr. (II)  
Mr. Shaikh Nana Saheb, Gr. (II)  
Mr. K. Niranjana, Gr. (II)  
Mr. N. Venkata Ramana, Gr. (I)  
Mr. K. Prasad, Gr. (I)  
Mr. V. Shivaji, Gr. (I)  
Mr. O. Veeraraju, Gr. (I)  
Mr. K. Dharma Raju, Gr. (I)  
Mr. P. Brahmaananda Rao, Gr. (I)  
Mr. T. Satyanarayana, Gr. (I)  
Mr. P. Venkata K. Reddy, Gr. (I)  
Mr. P. Dora Reddy, Gr. (I)  
Mr. Shaikh Valisha, Gr. (I)  
Mr. A. Lakshman Reddy, Gr. (I)  
Mr. S. Subba Reddy, Gr. (I)  
Mr. Y. Batchilingam, Gr. (I)  
Mr. M. Govindu, Gr. (I)  
Mr. G.V.V. Satyanarayana, Gr. (I)  
Mr. A. Anandu, Gr. (I)  
Mr. A. Gurriah, Gr. (I)  
Mr. M.A. Rao, Gr. (I)

CIFE Centre  
Lahli, Via Anval, Rohtak  
124 411  
Haryana  
Phone: 01258-85506



CIFE Centre Rohtak  
Senior Scientist  
Dr. G. Venugopal (Officer In-charge)

Scientist-SS  
Mr. N. K. Chaddha

Technical Officers T-7  
Dr. M. Ali

Administrative Staff

Mr. V.K. Sinha, Jr. Clerk  
(on deputation)

Supporting Staff  
Mr. Gyani Ram, Gr. (I)  
Mr. Gyan Chand, Gr. (I)  
Mr. V.K. Tiwari, Gr. (I)

## NEW APPOINTMENTS

### Dr. S.C. MUKHERJEE TAKES OVER AS THE ACTING DIRECTOR OF CIFE

Dr. S. C. Mukherjee, M.V.Sc, Ph.D., FRVC, Principal Scientist, Head of Pathology Division CIFA, Bhubaneswar, took over as Joint Director of CIFE on 12 January 2000 and subsequently took over as the Acting Director of CIFE from 28 January 2000. He has more than 28 years of experience in research, teaching and training related to fish and shellfish disease diagnosis and control.

Dr. Mukherjee has the distinction of formulating CIFAX, a very effective medicine for the control of EUS and the technology is transferred to Industry for commercialization. He is the proud recipient of the Aquaculture award from Govt. of India. He has 99 research papers both national and international to his credit. He has participated in various international seminars in Sweden, Denmark, Norway, England, Thailand and Vietnam.



Name	Post	Date
Dr. Shubhendu Dutta	Scientist	2 April, 1999
Mr. R.N. Kamble	SS G (I)	12 June, 1999
Dr. G. Venkateshwarlu	Senior Scientist	16 June, 1999
Dr. Makesh	Scientist	10 November, 1999
Ms. Deepa Bhagat	Scientist	18 November, 1999
Dr. Neelam Saharan	Senior Scientist	24 November, 1999
Mr. Shyam Salim	Scientist	24 November, 1999
Ms. Usha Rani	Scientist	24 November, 1999
Ms. G. Guganya	Junior Clerk	2 December, 1999
Mr. Ravi Kumar	T-II-3 (Lucknow Center)	4 January, 2000
Dr. S.C. Mukherjee	Joint Director	12 January, 2000



## PROMOTION/TRANSFERS

The following promotions took place during the Year

Sr.No.	Name	From	To				
1	Mr. S. Natarajan	T-6	T-7	30	Mr. S.M. Shinde	T-II-3	T-4
2	Dr. A.K. Jaiswar	T-5	T-6	31	Mr. R.G. Kudale	T-II-3	T-4
3	Dr. R.S. Rana	T-5	T-6	32	Mr. Bhagat Singh	T-II-3	T-4
4	Dr. P.P. Srivastava	T-5	T-6	33	Mr. Mohammed Ghani Hawa	T-II-3	T-4
5	Mr. Alkesh Dwivedi	T-5	T-6	34	Mr. A. Sadanand	T-II-3	T-4
6	Dr. C.S. Chaturvedi	T-5	T-6	35	Mr. P.B. Sonawane	T-II-3	T-4
7	Mr. S.G.S. Zaidi	T-5	T-6	36	Mr. P.K. Patra	T-2	T-I-3
8	Mr. R.D. Tandel	T-5	T-6	37	Mr. S.R. Bandhkar	T-2	T-I-3
9	Dr. (Mrs) Zeba Jaffer Abidi	T-5	T-6	38	Mr. N.K. Aglave	T-2	T-I-3
10	Mrs. Rama Sharma	T-5	T-6	39	Mr. S.V. Patil	T-2	T-I-3
11	Mrs. Asha T. Landge	T-5	T-6	40	Mr. Bharat Rathod	T-2	T-I-3
12	Mr. V.G. Dube	T-4	T-5				
13	Mr. J. Krishna Prasad	T-4	T-5				
14	Mr. C.K. Sajeev	T-4	T-5				
15	Mr. K. Murali Mohan	T-4	T-5				
16	Mr. P. Srinivasa Rao	T-4	T-5				
17	Mr. V.N. Acharyulu	T-4	T-5				
18	Mr. A.K. Mondal	T-4	T-5				
19	Mr. R.K. Biswas	T-4	T-5				
20	Shr J.P. Patil	T-4	T-5				
21	Mr. R.K. Upadhyay	T-4	T-5				
22	Mr. R.S. Rajguru	T-4	T-5				
23	Mr. P. Satyanarayana	T-II-3	T-4				
24	Mr. S.K. Upadhyay	T-II-3	T-4				
25	Mr. K.R. K. Reddy	T-II-3	T-4				
26	Mr. R.R.S. Patnaik	T-II-3	T-4				
27	Mrs S.N. Bagwe	T-II-3	T-4				
28	Mr. Chandrakant Kareer	T-II-3	T-4				
29	Mr. Bhaskar Mandre	T-II-3	T-4				

The following employees who stagnated more than 12/24 years have been considered for the grant of financial upgradation under the Assured Career Progression (ACP) Scheme.

S.No.	Name	Designation
1.	Ms. Kaberi Biswas	Jr. Stenographer
2.	Mr. B.N. Sukur	SS Gr.IV
3.	Mr. M.B. Bhokse	SS Gr.IV
4.	Mr. S. Kamaraju	Cook
5.	Mr. G.C. Saha	SS Gr.IV
6.	Mr. O. Veera Raju	SS Gr.I
7.	Mr. K. Dharma Raju	SS Gr.I
8.	Mr. T. Satyanarayana	SS Gr.I
9.	Mr. Ram Barose	SS Gr.I
10.	Mr. Ram Keval Prasad	SS Gr.I

## TRANSFER

S.No	Name and designation	From	To
1.	Dr. R. Sathiadas, Principal Scientist	CIFE, Mumbai	CMFRI, Cochin

## RETIREMENTS

1. Mr. B. Shankarlal, T-2	31 June, 1999
2. Dr. G. Gopal Krishna, Senior Scientist	29 February, 2000

## VOLUNTARY RETIREMENTS

1. Mr. J.R. Jaiswar	1 January, 2000
2. Mr. K.A. Manchekar	1 February, 2000

## DEATHS

1. Mr. Sukhbir, SS Grade	8 November, 1999
2. Mr. Shivaji Shelke, SS Grade I	10 March, 2000
3. Mr. Thangappan, T-5	23, March 2000

## OBITUARY

CIFE parivar mourns the sad demise of Dr. D.V. Bal the founder and first Director of CIFE who passed away on 1st April 1999 after sustaining a fall and a brief illness. He was 94.

# संक्षिप्त प्रतिवेदन

इस संस्थान के मुख्यालय एवं उपकेन्द्रों द्वारा संचालित स्नातकोत्तर एवं पी.एच.डी. शैक्षणिक कार्यक्रम भी अन्य संस्थानों तथा केन्द्रीय समुद्रीय मात्स्यिकी अनुसंधान संस्थान, कोचीन, केन्द्रीय मत्स्य प्रौद्योगिकी संस्थान, कोचीन, केन्द्रीय मीठा जल जीवपालन अनुसंधान संस्थान, भुवनेश्वर के साथ सुचारु रूप से सम्पन्न हुआ। स्नातकोत्तर के विभिन्न पाठ्यक्रमों में कुल 44 छात्र सफलतापूर्वक उत्तीर्ण हुए जबकि 1 छात्र ने अन्तरस्थलीय जलकृषि में पी.एच.डी की डिग्री हासिल किया। डी.एफ.सी. के अंतिम सत्र में कुल 19 छात्रों ने सफलतापूर्वक पाठ्यक्रम उत्तीर्ण किया जबकि 32 प्रतिभागियों ने संस्थान के कलकत्ता केन्द्र से आन्तरस्थलीय मात्स्यिकी विकास एवं प्रशासन में 1 वर्ष का स्नातकोत्तर प्रमाण पत्र पाठ्यक्रम उत्तीर्ण किया। पी.एच.डी. के विभिन्न पाठ्यक्रमों में 15 छात्रों का नामांकन तथा 5 एम.एफ.एस.सी. पाठ्यक्रम में 38 छात्रों का नामांकन किया गया। कलकत्ता उपकेन्द्र में एक वर्ष का स्नातकोत्तर प्रमाण पत्र पाठ्यक्रम में 41 प्रशिक्षणार्थियों के नामांकन किए गए।

मात्स्यिकी विज्ञान में सी.ए.एस. स्कीम के अन्तर्गत वैज्ञानिकों/संकाय सदस्यों आदि के लिए कुल 3 प्रशिक्षण कार्यक्रम संचालित किए गए। इस प्रशिक्षण कार्यक्रम के अन्तर्गत 50 प्रतिभागियों को प्रशिक्षित किया गया। छात्रों के हित के लिए 6 बाहरी संकाय द्वारा अतिथि व्याख्यान एवं 3 विशेष व्याख्यान के म.शि.सं. संकाय द्वारा ए.आर.एस. फोरम के अन्तर्गत आयोजित किए गए। केन्द्रीय मत्स्य शिक्षा संस्थान संकाय ने भी अन्य संस्थानों में लगभग 30 अतिथि व्याख्यान दिए।

15 संस्थान वित्तीय अनुसंधान परियोजना एवं 8 बाहरी वित्तीय अनुसंधान परियोजना चल रहा है। उल्लेखनीय अनुसंधान उपलब्धियों से साथ-साथ मांगूर प्रजनन को सफलतापूर्वक प्रेरित किया गया। इसके साथही लेबियो रोहिता के आहार, झींगा पालन तकनीक तथा आन्तरस्थलीय लवणीय जल मात्स्यिकी, माइक्रोफ्लोरा के 202 प्रजतियों की पहचान आदि अनुसंधान का कार्य चल रहा है। वर्ष के दौरान कुल 9 अल्पकालीन प्रशिक्षण कार्यक्रम क्रमशः 7 दिन एवं 6 महिने के अन्तराल में संचालित किए गए जिसमें कुल 213 प्रतिभागियों ने सफलतापूर्वक प्रशिक्षण ग्रहण किया। मत्स्य सलाहकार सेवा से लगभग 100 किसानों एवं उद्यमियों ने लाभ उठाया। संस्थान के जलकृषि प्रयोगशाला में जलकृषक एवं उद्यमियों द्वारा दिए गए 120 मिट्टी एवं पानी के नमूने की जांच की गई। इस वर्ष के दौरान संस्थान की गतिविधियों को देखने प्राईमरी से लेकर स्नातकोत्तर तक के 550 छात्र-छात्राएं संस्थान आए। अन्य विस्तार क्रियाकलापों में तीन प्रदर्शनियों का आयोजन किया गया तथा फिशिंग विलेज में एक चेतना कैम्प का भी आयोजन किया गया। यह वर्ष इस बात का गवाह है कि संस्थान में मात्स्यिकी एवं जलकृषि विषय पर अनेकों हिन्दी पुस्तक पुस्तिकाओं का प्रकाशन किया गया।

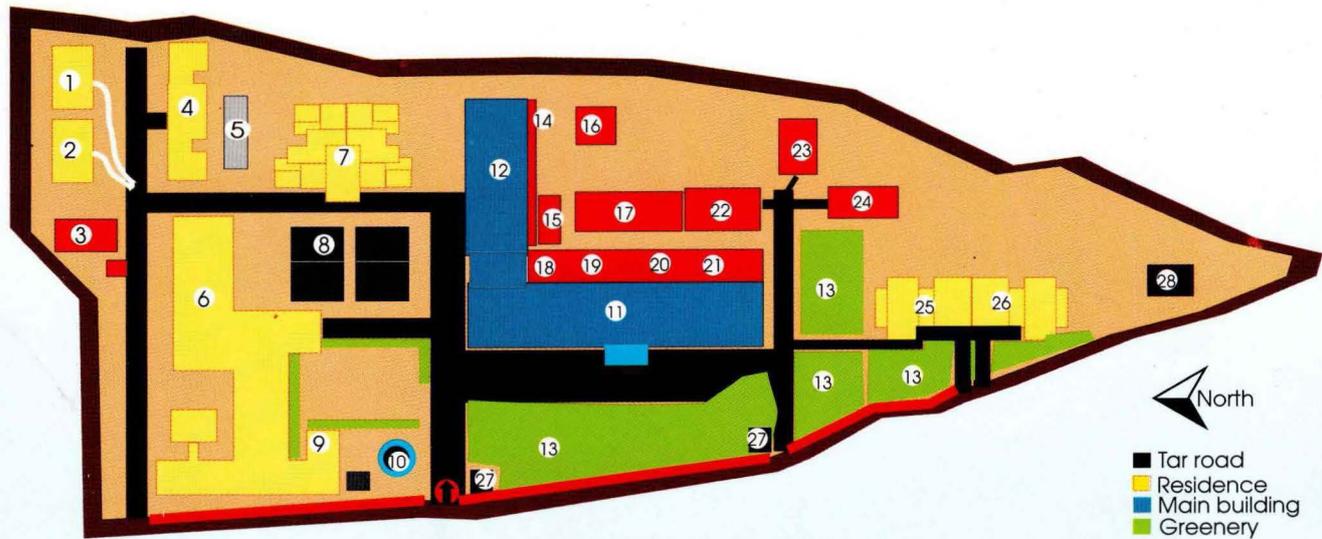
केन्द्रीय मत्स्य शिक्षा संस्थान को इस बात का गर्व है कि उसे इस वर्ष कई प्रतिष्ठा एवं पुरस्कार हासिल हुए हैं। स्वतंत्रता की स्वर्णजयन्ती के अवसर पर इस संस्थान से प्रकाशित विभिन्न सी.ए.एस. प्रशिक्षण कार्यक्रम पाठ्यक्रम मैनुअल की उच्च कोटि की गुणवत्ता को देखते हुए भा.कृ.अनु.प. ने प्रमाण पत्र देकर सम्मानित किया है। इस संस्थान ने भा.कृ.अनु.प. अन्तरसंस्थान क्रीडा टूर्नामेंट जोन II भाग लेकर एथलेट में कुल तीन प्रथम एवं एक द्वितीय पुरस्कार प्राप्त किया। यह संस्थान में हिन्दी में सर्वाधिक काम करने पर भारतीय कृषि अनुसंधान परिषद द्वारा चलाए जा रहे प्रथम राजर्षि टंडन अवार्ड से भी सम्मानित किया गया है।

संस्थान के निदेशक डा. एस.ए.एच.अबिदी को राष्ट्रीय कृषि विज्ञान अकादमी द्वारा फेलो की उपाधि से सम्मानित किया गया तथा सी.एस.आई.आर. की इंडियन साईंटिफिक एण्ड इन्डस्ट्रीयल जॉर्नल का 3 साल के लिए सम्पादकीय समिति हेतु नामित किया गया है जबकि संस्थान के प्रधान वैज्ञानिक डा. एस.डी.सिंह ने मैन आफ द ईयर 1999 तथा 2000 आउटस्टैंडिंग इंटेलेक्चुअल आफ द 20th सेंचुरी दो अन्तरराष्ट्रीय सम्मान से सम्मानित किये गए। इसी क्रम में संस्थान की वरिष्ठ वैज्ञानिक डा.(श्रीमती) नीलम सहारन को उनके लेख पर उन्हें भारतीय खाद संगठन द्वारा धीरु मोरारजी मेमोरियल एवार्ड प्रदान किया गया है। संस्थान के वैज्ञानिक डा. के पाणीप्रसाद को इस वर्ष 2000 को बेस्ट यंग साईंटिस्ट एवार्ड से सम्मानित किया गया है।

प्रकाशन के क्षेत्र में इस संस्थान ने वर्ष 1998-1999 में कुल 13 प्रशिक्षण मैनुअल, 13 पुस्तके, 5 विस्तार पुस्तिकाएं, 4 मराठी भाषा में विस्तार पुस्तिकाएं तथा राष्ट्रीय संगोष्ठी का सारांश आदि प्रकाशित किया है।

वर्तमान वर्ष के दौरान संस्थान के संरचना विकास में दो नए प्रयोगशालाओं का निर्माण किया गया है जिसमें एक जैव रसायन तथा दूसरा मोलिक्यूलर तथा जैव प्रौद्योगिकी है। इसके साथ ही केन्द्रीय पुस्तकालय में 735 नए पुस्तक 6330 इंडियन जरनल सहित 201 आन्तरराष्ट्रीय जरनल तथा 3 CD-ROMS खरीदे गए।

अन्य गतिविधियों में ठीक समारोह, गणेश चतुदर्शी, वार्षिक दिवस तथा सांस्कृतिक कार्यक्रम आदि का आयोजन किया गया।



Numerical key to buildings



1. Type I quarters G+2
2. Type II quarters G+2
3. Gymnasium
4. Type IV quarters G+2
5. Pump room
6. Hostel (G+2)
7. Transit building
8. Badminton courts
9. Canteen
10. Well
11. CIFE main building (G+2)
12. Workshop , Store & Accounts
13. Garden
14. Algae/ seaweed culture lab
15. Aquaculture instruments lab
16. Feed room
17. Wet lab ( being constructed )
18. Aquaculture faculty room
19. Soil and water analysis lab
20. Aquaculture lab
21. Ornamental fish breeding lab
22. Hatchery unit
23. Nutrition lab. and Water tank
24. Centre for Southern Ocean Fisheries
25. Director's Residence
26. Dolphin guest house
27. Security
28. Electrical substation

Important phone numbers:

Director : (O) 022-6363404 (R) 022-6361656  
 Jt. Director: (O) 022-6302232 (R) 022-6390657  
 S.A.O: (O) 022-6361446/7/8 (R) 022-6361632\*  
 F.A.O. (O) 022-6361446/7/8 (R) 022-6338347\*

\*Private connection

# CIFE CAMPUS ( Existing )

Not to scale

# CIFE



## Centres

### CIFE Centre

Salt Lake City  
Culcutta, West Bengal  
☎(033)560 02 88  
Telex : (9033)214 154, 218 552  
Fax : (033)560 03 88

### CIFE Centre

Beach Road, Kakinada-533 007  
Andhra Pradesh  
☎(0473)73606  
Telex : 0473-257

### CIFE Centre

Kathota Tal, P.O.Chinhat-227 105  
Lucknow (U.P)  
☎(0522) 315848  
Fax : 0522-315848

### CIFE Centre

Lahli, Via Annual, Rohtak-124 411  
Haryana

## headquarters

### Central Institute of Fisheries Education (Deemed University-ICAR),

Seven Bungalows,  
Versova, Mumbai - 400 061

☎ (022)636 14 46/7/8

Fax: 022-636 15 73

e-mail : fishinst@bom3.vsnl.net.in

Website: cife@bom3.nic.in

## aquafarms

Freshwater Fish Farm (CIFE),  
Powarkheda, Hoshangabad-461 110  
Madya Pradesh

Freshwater Fish Farm ( CIFE),  
Balabadrapuram-533 360,  
Andhra Pradesh