# CIFRI News

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**Contents**



**The Committee**

Published by: Prof. A. P. Sharma, Director

Edited & Complied by: Dr. P. K. Katiha

Assisted by: Ms. Sunita Prasad, Md. Quasim & Shri Sujit Choudhury

Hindi Translation: Shri P. R. Rao & Ms. Sunita Prasad

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## From Director's Desk

Dear Readers,

I take this opportunity to congratulate Dr. B. Meenakumari for taking over as Deputy Director General (Fishery) and Dr. S. D. Singh for becoming Assistant Director General (Inland Fishery) at Fisheries Division of ICAR, New Delhi. Madam Meenakumari is the first lady Deputy Director General of ICAR. CIFRI wishes her all the best for the new assignment and expect that she will carry forward the legacy of Hon'ble Dr. Ayyappan in the field of fisheries research and development. We also wish Dr. Singh all the success and hope that inland fisheries research will attain new heights under his able guidance.

The devotion of institute staff continued in various research, technology transfer, and human resource development activities. The scientists continued to execute ongoing project research activities related to different inland waters. The highlighted activities in this newsletter include assessment of impact of adoption of pen culture technology in Assam, observations on fish yield enhancements in wetlands of Uttar Pradesh, standardizing stocking protocols for Assam wetlands, success of fish based integrated production system in seasonally flooded area of West Bengal in public private partnership mode, studies on fish catch compositions of Yamuna river indicating invasion of tilapia as a red signal for native species and models for prediction of water quality parameters of inland waters through remote sensing techniques. The software SAS 9.2 was installed in the institute, which will strengthen the analytical capacities for scientific observations. The institute organised a number of workshops and its staff attended large number of meetings outside the institute. Institute scientists have published five bulletins and one pamphlet, besides many research papers in national and international journals during this period. Many technical and scientific staff got promotion and some were transferred across institute centers and headquarters.

The Institute has organised a number of meetings including Regional Consultation on Preparation of Management Plan for Hilsa Fisheries, two RAC and one IRC meetings, besides Sunderbans Day. CIFRI foundation Day celebrations witnessed number of academic, social and entertainment events. During this period one Bio-diversity Lab was also inaugurated. The administrative and financial plan targets have been achieved during this period.

A Number of scientific and administrative staff superannuated during this period. We wish all of them a happy, active and healthy retired life. Some new scientists and other staff members have joined CIFRI. I warmly welcome them and wish all the success. Any suggestions from our respected readers for further improving the newsletter will be highly appreciated.

Barrackpore
December, 2010

Prof. A. P. Sharma

## Our New Deputy Director General

Dr. B. Meenakumari, has taken over as the Deputy Director General (Fishery) at Indian Council of Agricultural Research, New Delhi. She is the first ever woman to occupy this prestigious position. Dr. Meenakumari, having more than 32 years of service in ICAR, is a scientist of high repute, particularly in the field of Fishing Technology. She has over 100 highly quoted research publications. Prior to this assignment, she was the Director of CIFT since November 2008. She was also Head of Division of Fishing Technology at CIFT for over eight years. She has done extensive research in the areas of fishing practices for reservoirs and coastal and deep sea fishing. She was responsible for up-gradation of gear systems for reservoirs and introduction of eco-friendly fishing methods, which led to conservation of fishery resources in most of the natural waters. She was also associated with remote sensing and validation of PFZ, pollution monitoring, environment impact assessment, marine corrosion and bio-deterioration, fisheries policies of Kerala state, *etc*. Dr. Meenakumari is a recipient of Young Scientist Award of Govt. of Kerala (1989), Fellow of Academy of Environmental Biology, Lucknow, Fellowship Award (2002) from Bioved Research Society, Allahabad, Panjabrao Deshmukh Women Agricultural Scientist Award (2002) of ICAR, Vasvik Award (2003), WATI National Award (2007), Fellowship of Academy of Science, Engineering and Technology (ASET), Fellowship award from Zoological Society, Calcutta (2008) and Dr. R.C. Dalela Oration Award (2009). She has taken up short term assignment studies at International Ocean Institute, Canada on UN Convention on the Law of the Sea and its implementation (1977), Bedford Institute of Oceanography, Canada on receiving POGO-IOC-SCOR fellowship (2002) and Plymouth Marine Laboratory, U.K. to attend First Chlorophyll Workshop and Meeting (2006).

CIFRI wishes Dr. B. Meenakumari all the success for this prestigious assignment and for her future ventures and expects that the golden days of fisheries sector in our country will continue under her worthy guidance.

## Our New Assistant Director General

Born on January 1, 1954, Dr. S. D. Singh has joined as Assistant Director General (Inland Fishery) in June, 2010. Doctorate from University of Allahabad, Dr. Singh has served number of institutions including Indian Veterinary Research Institute, Bareilly, Kanpur University, Indian Institute of Sciences, Bangalore, Jawaharlal Nehru University and Central Institute of Fisheries Education (CIFE), Mumbai in various capacities. He joined ICAR as ARS Scientist in 1978 and contributed significantly in research, teaching, training and extension. Before joining the present position Dr. Singh was Head of Division and Chairman of Board of Studies at CIFE during 2001-2009. He has guided over 50 students for post doctorate, doctorate and masters research. Dr. Singh has over 140 acclaimed national and international publications. He has handled number of international and national projects and developed many technologies. He is widely travelled and visited the countries of Japan, United Kingdom, Australia, France, China, Canada, and United States of America.

The staff of CIFRI wishes him a great success in present and future efforts.

## Research Updates

### CIFRI pen culture technology was adopted in beels of Assam

CIFRI developed pen aquaculture technology using locally available and low-cost materials for raising carp fingerlings for stocking in the beels of Assam. The technology was adopted at 46 Morakolong and Lali beels of Morigaon and Haodar anoa in Karimganj district for fish seed and table size carp production. In 46 Morakolong beel, use of mosquito net as pen screen further reduced the cost as compared to split-bamboo screen (bana). A Self Help Group, namely, Rangapani Beel Atmasahayak Got adopted the technology in Rangapani beel near Tezpur under MNREG Scheme for raising table-size carps. Two pens each of 0.24 ha were installed in the beel and total cost of fish production was Rs. 1.31 lakh with Rs. 0.56 lakh for labour for the fishers, Rs 0.27 lakh for pen material and remaining for seed (catla, rohu, mrigal, silver carp, common carp and grass carp @ 6000 fingerlings/ha) and feed (rice bran-oil cake mixture in ratio of 1:1). CIFRI and State Department of Fisheries officials provided the technical guidance on cage culture. The fish yield of the beels was 2,400 kg/ha. Encouraged with the results, the group stocked the beel cages with catla, rohu, mrigal, silver barb (*Puntius gonionotus*), common carp, *Labeo bata* and grass carp @ 12000 fingerlings/ha.

### Fish yield enhancement from Mahane wetland

Mahane wetland in Unnao district of Uttar Pradesh having a water spread of 40 ha and mean depth of 1.3 m was selected for fish yield enhancement. The wetland has diverse catchments of agricultural fields, human settlements and pasture. Percolation from a nearby canal, flood water from the catchments during rains and the canal water were the sources of water to the wetland. Initially during floods, the wetland was connected with river Ganga. It provided regular water and natural fish seed in the wetland. The fish stock enhancements increased the fish yield of wetland from 225.0 kg/ha/yr in 2008 to 520 kg/ha/yr in 2010. This enhancement was due to adoption of CIFRI recommendations for weed control, timely stocking of 80-100 mm sizes fingerlings of Indian major carps (*Labeo rohita, Catla catla, Cirrhinus mrigala*) and exotics (*Ctenopharyngodon idella* and *Cyprinus carpio* communis). The fingerlings were raised at nearby nursery ponds. Besides stocked fishes, the wetland also harbours some highly prized fishes like *Sperata seenghala, Wallago attu, Heteropneustes fossilis, Ophiocephalus marulius, Ophiocephalus striatus, etc.*

### CIFRI successfully implemented fish based farming system in seasonally flooded areas of West Bengal with community participation

The fish based farming system developed with community participation was implemented in seasonally flooded area at Janki Chak (33 ha) of Purba Midnapur district in West Bengal. The practices of fish based farming system were discussed and finalised with stakeholders for paddy-cum-fish culture.

Seasonally flooded wetland, Janki Chak

The water regime and physico-chemical characteristics of the seasonally flooded areas were investigated to implement paddy-cum-fish culture practices. The physico-chemical properties of water and soil indicated highly eutrophic water body condition. Sediment organic carbon was quite high due to remaining of paddy root system and varied in the range of 1.56 to 1.77%. Institutional and governance arrangements indicated that farmers organised themselves into a co-operative society. Gram Samiti, an informal Local Governance Institution leased out the areas through open auction to society for one year for fish culture during May-April with lease amount of Rs 12 lakh. Fish catch was sent to Annapurna, Moyna block and Moyna market. But due to sequential catch disposal from different flooded areas in the block, the fish supply is regulated to have better prices. The major constraint was lack of availability of funds for production activities. The viability of scientific practices for fish production indicated total production at 111.48 t with maximum share of *C. catla* (56.55 t) followed by *L. rohita* (22.86 t) and other fishes (16.66 t). The fish and water productivity was estimated at 3377 kg/ha as compared to 2540 kg/ha during last year. The economics of fish production revealed total cost of fish production at Rs 38.23 lakh and total income at Rs 85.32 lakh with net profit of Rs 47.09 lakh. The overall Benefit cost ratio was estimated at 2.23. It indicated success of the fish based farming system with community participation.

Fish haul from Janki Chak

## Fish stocking practices in the beels of Assam

Field data on various aspects of stock enhancement were collected from 26 beels of Assam to understand the existing stocking practice and impact of stocking on fish production. The main criteria for selection of candidate species for stocking in the selected beels were growth performance, consumer preference and market price, availability of seed and catchability. The beels located in Lower and Central Brahmaputra Valley Sub-zones were stocked with carried-over carp fingerlings during the pre-monsoon months of February-March. These yearlings grew rapidly in the beels taking advantage of warm temperature regimes and abundant natural food and grew to marketable size by the first half of January next year during Bhogalee bihu (local food festival). Fresh carp fingerlings were stocked in beels of Barak valley during August- September. For shallow beels (post-monsoon season depth range 3-4 m) a tentative percent species ratio of 40 Surface Feeder (SF): 30 Column Feeder (CF): 30 Bottom Feeder (BF) was suggested, whereas for deeper beels (depth >4 m), a tentative species ratio of 2 SF: 1 CF: 1 BF was suggested. However, species ratio followed in the selected beels varied widely. Higher stocking density was practiced in closed beels (2190 no./ha to 10000 no./ha) than that in seasonally open ones (833 no./ha to 8750 no./ha). Fish production from closed beels ranged from 149.3 to 1387.8 kg/ha/yr in which more than 60% contribution came from stocked fishes indicating that culture-based fisheries were practiced in these beels. In seasonally open beels, total fish production varied from 41.0 to 528.8 kg/ha/yr in which contribution of stocked fishes was comparatively less. The studies indicated that optimization of stocking in the beels of Assam may lead to enhanced fish production and productivity to yield better returns for the fishers.

Fishing in a beels of Assam

Fish seed stocked in a beel

## Big Catla caught in Assam Beel

A large size Catla weighing 30 Kg was caught in Morikolong-Potakolong beel in Nagaon district of Assam in January 2010. It took nearly three days to catch this unusually large fish using drag net. The earlier record of largest fish caught was 26 kg from Dhuburi district.

Large size Catla from a beel

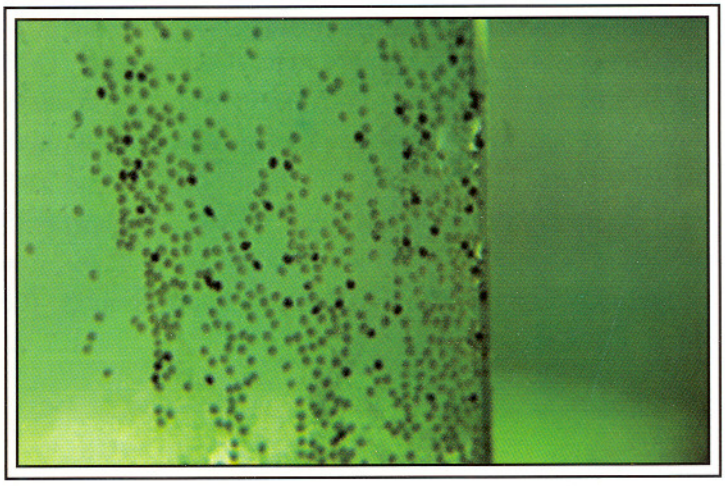
## Yamuna is an abode for invasive tilapia and common carps

The river Yamuna along with Ganga is known as original abode of the Indian Major Carps. But, the picture has been changed drastically for last two decades. A gross alteration in the biota and fish dominance was observed in the system. Now tilapia dominated the fish catch in the river in general and in middle stretch from Hamirpur to Delhi in particular. Tilapia replaced native valuable fish species (*Labeo gonius, Labeo calbasu, Catla catla, Cirrhinus mrigala, Sperata aor, Sperata seenghala, Rita rita, etc*) and changed the trophic structure of the system at a very rapid rate. Tilapia population was seen in the river at extremely adverse ecological conditions (dissolved oxygen <1.0 mg $l^{-1}$). As a result, middle stretch of the river has sizeable Tilapia catches (90-99%). It was confirmed by the fish landings at local fish markets *i.e.* Mathura, Agra and Kanpur. Tilapia has low consumers preference and fetched very low prices of Rs. 5-10/kg (fish weight 100-200 gm). Most of the Indian rivers have very low water flow, rarely pristine habitats, biota and valuable native fish species. Therefore, strong and effective rehabilitation and conservation measures are the need of the hour to safeguard the rivers and valuable germplasm.

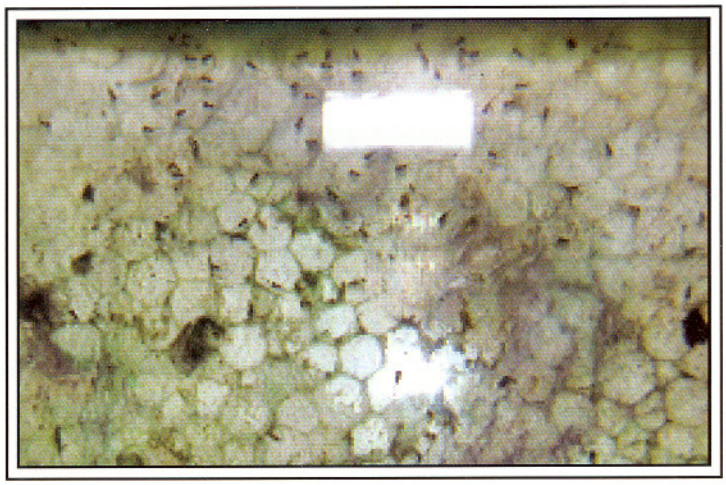
Invasion of Tilapia in river

## Spawning of Angel Fish in ornamental fish hatchery

CIFRI has implemented National Seed Project successfully. Under the project, Angel fish (*Pterophyllum scalare*) was successfully bred without use of inducing agents. Following the clue of pairing behavior, a pair of fish (18 g BW each) were segregated in 50 l glass aquarium filled with tube well water (pH 6.5 -7; dissolved oxygen 7 - 7.5 mg $l^{-1}$). It was fed with commercial feed and tubifex worms for 25 days. An inclined glass strip was provided as an adhesive substratum for eggs. The fish naturally spawned over a period of 2 days with milky - translucent 900 -1500 eggs, attaching to the glass strip.



Eggs attached to glass plate

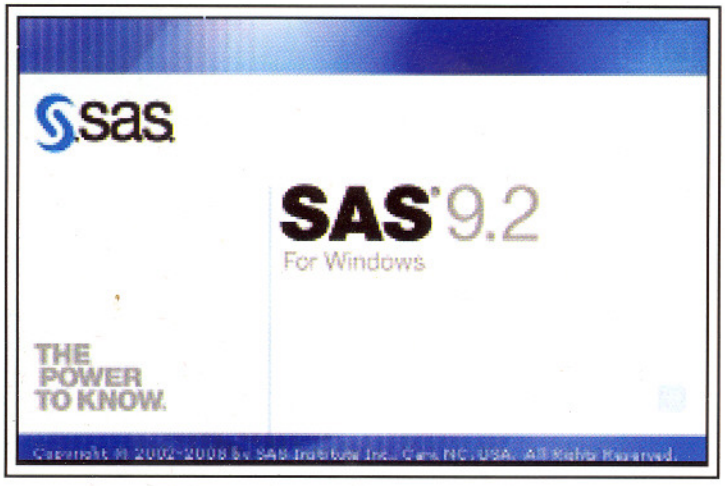


One day old hatchlings with yolk sac

The egg strip was removed to another aquarium, in which hatching process started after 34 hr and continued over a period of 6-8 days. The observed hatching rate was 78%. Mixed plankton collected from earthen ponds were provided to the hatchlings after yolk sac absorption in 3 days. The poor survival of spawn (< 20%) was observed. It may be due to feeding deficiency or acceptability. This problem may be overcome by use of artemia, despite the higher cost. Search for alternatives and standardization of larval feeding protocol require close attention in larval management of ornamental fishes.

### SAS 9.2 Software is installed in CIFRI

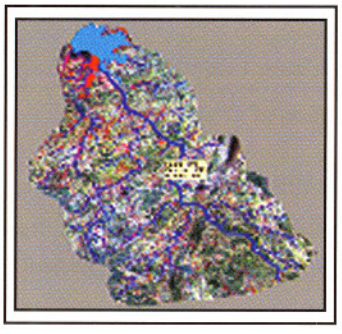
Advanced statistical computing facility in form of SAS 9.2 Standalone Software was installed in the institute under NAIP. It will help the researchers to publish their finding in heavy impact international refereed journals of repute with high impact factors. The software has the models a) base SAS software, b) SAS / Stat software, c) SAS / Graph d) SAS Enterprise Guide e) SAS / ETS Software f) SAS/OR software g) SAS / QC software h) SAS / Access interface to PC file

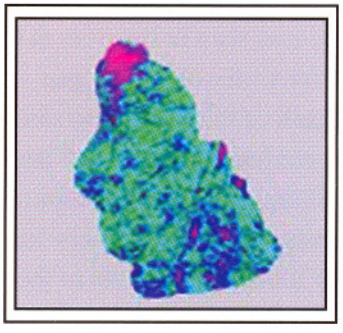



formats i) SAS/Access to OLE DB j) SAS/ Access to Interface to ODBC k) SAS/Access interface to Oracle, SQL Server, DB2 l) SAS/LAB Software m) SAS/IML software /SAS IML Studio, n) SAS/Genetics software and o) JMP Genomics (inclusive of JMP Statistical Discovery Software). Besides this, users can link IASRI server to access advance statistical tools like Information map studio, OLAP cub Studio and Enterprise miner Client. This software is currently installed at IT & ARIS Cell; it will be further installed to all the official Desktops and Laptops.

### CIFRI used Multi Linear Regression Model to predict water quality parameter using remote sensing and GIS techniques

Linear and multiple linear regression models were developed using remote sensing Geographical Information system (GIS) to estimate the water quality, soil quality parameters and chlorophyll concentration in the districts of Purulia, West Bengal and Jhansi, Uttar Pradesh. Imagery procured from NRSA, Hyderabad and 1:50000 SOI toposheets were used to analyse the catchment area and delineate catchment area of water body, respectively. All the streams were digitized and classified and grouped under first, second and third order water bodies, based on streams. IRS P6 imagery was classified based on supervised image processing methods and landscape matrix was prepared. Percentage of area under forest, settlement, agricultural land, water body and grassland in the catchment area was also estimated.





## Trainings, Mass Awareness Campaigns and Exhibitions

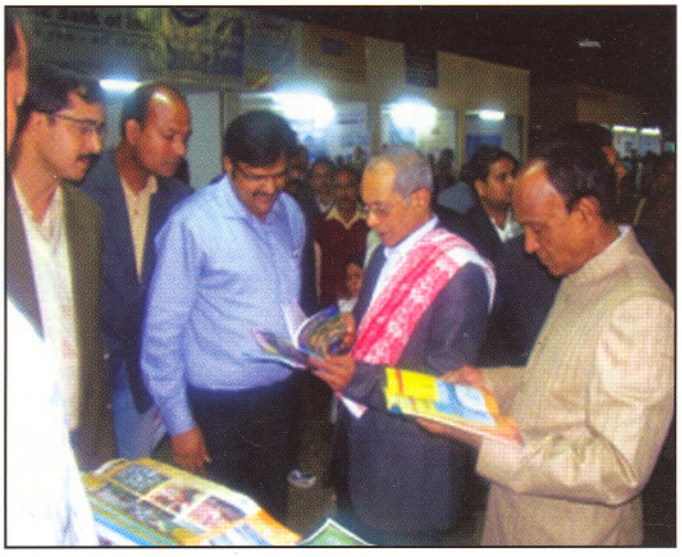
| Title of the Training | Date & Place | No. of Participants |
|---|---|---|
| Fisheries Development | 7-8 January, 2010 at CIFRI Barrackpore | 20 fish farmers of Andaman and Nicobar Islands |
| Inland Fisheries Development | 11-20 March, 2010 at CIFRI, Barrackpore | 30 fish farmers from Bihar |
| Management of chaur (wetland) for livelihood improvement | 29 -31 March 2010 at CIFRI, Barrackpore | 12 fishers from Bihar |
| Inland Fisheries Development | 5-7 April, 2010 at CIFRI, Barrackpore | 35 progressive fish farmers from Bihar |
| Individual training deputed by the Director of Fisheries | 15-17 April, 2010 at CIFRI, Barrackpore | One progressive fish farmer from Uttar Pradesh |
| Inland Fisheries Development | 18-19 April, 2010 at CIFRI, Barrackpore | 43 fishers of Bihar |
| Inland Fisheries Development | 24 April 2010 at CIFRI, Barrackpore | Seven Fisheries Officers from Himachal Pradesh |
| Inland Fisheries Development | 5-7 May, 2010 at CIFRI, Barrackpore | 35 fishers of Bihar |
| Sampling methodologies for estimation of fish catch and use of software for catch assessment survey for inland fisheries under Central Sector Scheme | 15-18 June and 23-26 June, 2010 at CIFRI, Barrackpore | 11 personnel from Deptt. of Fisheries of Tripura, Mizoram, West Bengal, Meghalaya, Arunachal Pradesh, Manipur and Bihar |

Lecture in training programme on Management of Chaur (wetland)

Practical exercise under training programme on Inland Fisheries Development

| Title of Mass Awareness Compaign | Date & Place | No. of Participants |
|---|---|---|
| Conservation of Hilsa juveniles | 4 April, 2010 at Kakdwip | 32 fishers |

| The exhibitions held at | Date & Place |
|---|---|
| Manmahan Mela-o-Krishi Mela | January 3-10, 2010 at Gaighata, 24 Pgs (N) |
| Assam Matsya Mahotsav | January 30-February 1, 2010 at Guwahati |
| All India Krishi Vigyan Mela 2010 | 4-6 March, 2010 at Indian Agricultural Research Institute, New Delhi |
| Indian Aqua Invest Congress and Expo | 26-28 May, 2010 at Mumbai |
| Exhibition at NIRJAFT | 18 June, 2010 at Kolkata |



Hon'ble Minister of Fisheries Sri Nurjamal Sarkar, Govt. of Assam

# Symposiums/Workshops organised by CIFRI and attended by CIFRI Scientists

## NAIP Workshop on Arsenic Contamination and its mitigation strategies

A workshop on "Arsenic contamination and its mitigation strategies" was organized at Barrackpore during 11 - 12 February, 2010 under NAIP project on "Arsenic in food-chain: Cause, Effect and Mitigation". Prof. A. P. Sharma, Director, CIFRI; Prof. Saroj Kumar Sanyal, Vice-Chancellor, BCKV; Dr. D. N. Guha Mazumder, Director, DNGM Research Foundation, Dr. B. S Mahapatra, Director, CRIJAF, Dr. S. Bandopadhyay, Head, Ceramic Membrane Division, CGCRI,


Dr. J. K. Malik, Joint Director (Research), IVRI, Dr. A. K. Giri, Deputy Director, IICB, Prof. A. Santra, IPGMER, Kolkata, Prof. S. C. Santra, Department of Environmental Science, Prof. Supradip Sarkar, BCKV, CPI of the project and all the CCPIs attended the workshop. Prof. Sharma explained the scope of workshop and status of the project in the state. Prof. Sanyal presented a brief account on the arsenic problem emphasizing its widespread distribution and adverse effect on the common masses. Dr. D. N. Guha Majumdar in his keynote address highlighted the factors responsible for this arsenic menace. Dr. A. K. Giri highlighted significant findings on arsenic induced genetic damage and carcinogenicity in exposed individuals. He informed that arsenic can even induce anemia and can cause immunological changes in exposed individuals and considered rice as major route of chronic exposure to arsenic, which gave rise to significant DNA damage. He advocated for supply of water by treatment plants for arsenic mitigation.

## Workshop on "Small Indigenous Freshwater Fish Species (SIFFS)"

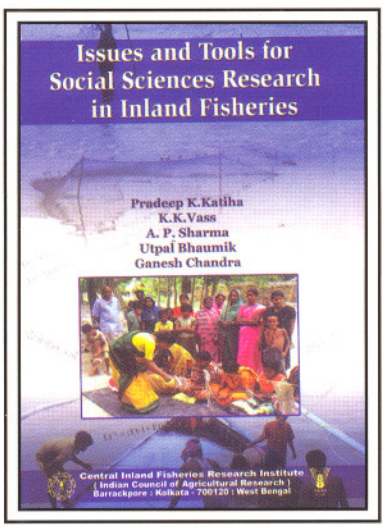
The International Collective in Support of Fishworkers (ICSF) and Inland Fisheries Society of India (IFSI) organized a workshop on "Small Indigenous Freshwater Fish Species (SIFFS) : Their role on Poverty Alleviation, Food Security and Conservation of Biodiversity", from 23-25 February, 2010 at Central Inland Fisheries Research Institute, Barrackpore, Kolkata, West Bengal. It brought together about 60 participants from fishers and aquaculture community, concerned Central and state government departments, NGOs, environmental


groups, researchers and experts from India and abroad. The workshop included a field trip to visit the farmers practicing culture of small indigenous freshwater fish species. The workshop formulated the road map for fisheries development of SIFFS in the country and addressed the related policy and other issues to provide congenial environment for the development.

Besides these meetings, Dr. A. P. Shrama, Director CIFRI, Head of Divisions and other CIFRI scientists participated in number of national seminars and meetings. They shared their experiences at different fora for academic and developmental pursuit.

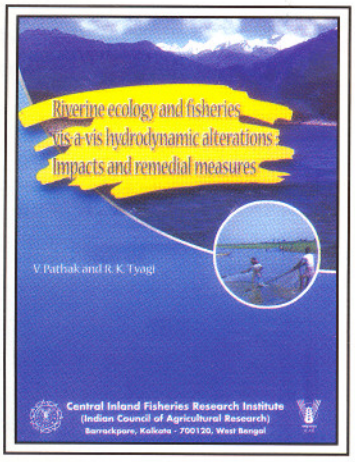
# Publications

## CIFRI has published five bulletins, one book and one pamphlet during this period.

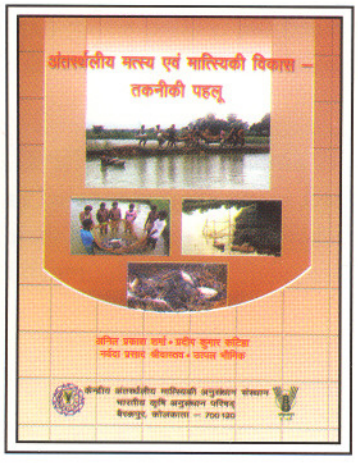



The bulletin "Issues and tools for social sciences research in inland fisheries" covered broad spectrum of socio-economic, institutional and methodological issues in fisheries. The experiences of renowned experts in the field of inland fisheries, economics, extension, statistics,

etc. are compiled in this publication with the objective to disseminate literature on observations, tools and techniques for conducting social science research in inland fisheries and aquaculture.

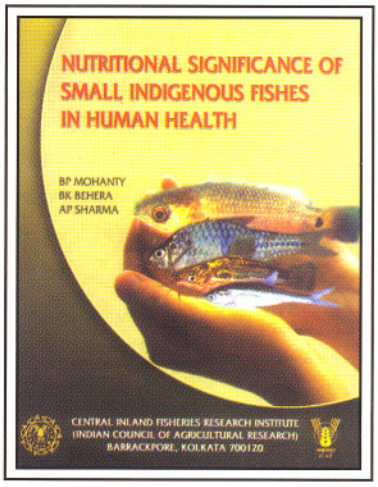


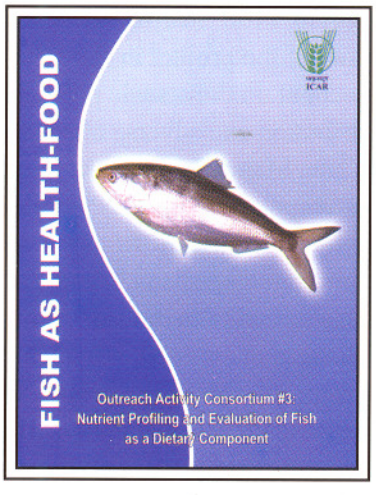

Detailed knowledge on hydrological alterations and their impact on riverine ecology and fisheries is the pre-requisite to develop fish conservation strategies for river systems. The document "Riverine ecology and fisheries vis-à-vis hydrodynamic alterations, impacts and remedial measures" addresses these issues in a lucid manner. The bulletin provided an in depth knowledge on ecology and fisheries in Indian major river systems in context of changed hydrological regimes and measures for conservation and optimum utilization of our riverine fisheries resources. It has also suggested the measures for conservation and restoration of riverine fisheries. Dissemination of scientific findings in general and poor people friendly technologies in particular, is the prime aim of any research and development institution. Further, it is necessary that this information should reach the clientele in their own and simple language, so, as to benefit them the most. With this backdrop the bulletin "Antarsthaliya Matsya Avam Matsyaki Vikas - Takniki so, as to benefit them the most. With this backdrop the bulletin "Antarsthaliya Matsya Avam Matsyaki Vikas - TaknikiPahlu"




is published in very simple Hindi to give the fishers and aquaculturists the technical details of inland fisheries and aquaculture technologies. Sunderbans are among global hot spots for ecosystem bio-diversity. Number of international and national agencies are working to study the burning issues and threats for these diverse mangroves. After the recent AILA, these investigations have got more momentum. The book "Sunderbans: Issue and threats" is precise information about these issues with special emphasis on fisheries. It also covered the aspects of its environmental status and diverse biodiversity, besides prospects of fisheries and aquaculture in the region. The publication has given number of suggestions for enhancing income and employment level of local populace.


One of the major challenge for fisheries R&D agencies is to popularize fish as one of the most healthy and nutritious food. In this direction CIFRI has published bulletin "Nutritional significance of small indigenous fishes in human health". It deals with the health benefits of eating fish and nutritional significance of small indigenous fishes (SIF) in human health. A list of small indigenous fishes; proximate composition, amino acid and fatty acid profile, mineral composition and vitamin A content of some small indigenous fishes are provided.




To popularize fish as a health food CIFRI has published one pamphlet "Fish as health food" to increase awareness amongst scientists and general public on the health benefits associated with fish consumption. This folder presents the benefits associated with fish oil, rich in polyunsaturated fatty acids (PUFAs) and omega-3 PUFAs. It also highlights fish as a cheap source of animal protein and rich source of minerals and vitamins. So the pediatric, adult as well as the elderly population should consume more and more fish and keep fit and remain healthy.

# Promotions / Transfers / Superannuations / New Appointments

## Promotions

| Name | Promoted to | With Effect From |
|---|---|---|
| Dr. S. S. Mishra | Principal Scientist | 18.03.08 |
| Shri R. C. Mandi | T-7-8 | 03.02.05 |
| Shri Sukumar Saha | T-7-8 | 03.02.05 |
| Smt. K. Jacquline | T-6 | 29.04.08 |
| Shri A. K. De | Asstt. Admn. Officer | 08.01.10 |
| Smt Sikha Majumder | Asstt. Admn. Officer | 14.06.10 |
| Shri D. Chowdhury | Assistant | 24.02.10 |
| Shri S. S. Ghosh | Assistant | 14.06.10 |
| Shri Dilip Kumar | Assistant | 14.06.10 |
| Shri Atanu Das | T-4 | 01.01.09 |
| Shri Subrata Das | T-4 | 27.01.09 |
| Smt Subra Saha | T-4 | 01.01.09 |
| Shri S. Bandopadhyay | T-4 | 01.07.09 |
| Shri Debasis Saha | T-4 | 01.07.09 |
| Shri Sanjay Kr. Das | T-4 | 11.08.09 |
| Shri Amoy Kr. Barui | T-4 | 01.01.10 |
| Shri S. K. Biswas | T-4 | 03.02.10 |
| Shri Ram Sajivan | T-3 | 29.06.06 |
| Shri Arun Mondal | T-3 | 29.06.06 |
| Shri M. V. Krishnan | T-3 | 15.07.07 |
| Shri R. Balmurugan | T-3 | 09.02.08 |
| Shri Ashis Chakraborty | T-3 | 18.02.08 |
| Shri A. K. Goswami | T-3 | 29.06.08 |
| Shri R. K. Roy | Sr. Clerk | 14.06.10 |
| Shri K. K. Dhir | Sr. Clerk | 14.06.10 |
| Shri N. Rajak | L.D.C. | 15.06.10 |
| Shri Fazal Khan | L.D.C. | 30.06.10 |
| Shri Ganesh Bhanja | L.D.C. | 30.06.10 |
| Shri B. L. Dhanuk | L.D.C. | 30.06.10 |

## Transfers

| Name & Designation | From | To |
|---|---|---|
| Shri Suranjan Kumar Singh, LDC | Vadodara | Barrackpore |
| Dr. S.S. Mishra, Principal Scientist | Barrackpore | Allahabad |
| Shri S. K. Sadhukhan, T-8 | Barrackpore | Kolkata |

## Superannuation

| Name & Designation | Place of last posting | Date of Superannuation |
|---|---|---|
| Shri Ambika Lal, Assistant | Allahabad | 31.01.10 |
| Shri Atiullah, SSG-II | Allahabad | 31.01.10 |
| Shri D. K. De Sarkar, Asstt. Admn. Officer | Guwahati | 31.03.10 |
| Dr. H. P. Singh, Principal Scientist | Allahabad | 31.03.10 |
| Smt. G. K. Vinci, Principal Scientist | Barrackpore | 30.04.10 |
| Dr. R. N. Seth, Principal Scientist | Allahabad | 30.06.10 |
| Dr. R. K. Tyagi, Principal Scientist | Allahabad | 30.06.10 |

## New Appointments

| Name | Designation | Date of Appointment |
|---|---|---|
| Shri Ratan Das | SSG 1 | 13-01-10 |
| Shri Anil Kumar Yadav | Scientist | 15-03-10 |
| Shri D. N. Jha | Scientist | 15-03-10 |
| Shri D. Panda | Scientist | 22-04-10 |
| Md. Absar Alam | Scientist | 22-04-10 |
| Shri C. M. Roshith | Scientist | 23-04-10 |
| Dr. K. D. Joshi | Head | 20-04-10 |
| Shri Amulya Kakati | T-1 | 25-05-10 |

## Events & Meetings

### Regional Consultation on Preparation of Management Plan for Hilsa Fisheries

Regional Consultation on Preparation of Management Plan for Hilsa Fisheries was held on 01 February 2010 at Central Inland


Fisheries Research Institute, Barrackpore, Kolkata. The programme was attended by Dr. Y. S. Yadava, Director, BOBP-IGO, Chennai, scientists of the Institute and officers of State Fisheries Departments. The meeting reviewed the information on distribution, biological status, migratory behaviour, habitat ecology, fishery and its natural recruitment, which are directly or indirectly affecting sustainable development of Hilsa fisheries in India

### Research Advisory Committee Meeting

The meeting of Research Advisory Committee (RAC) of the Institute was convened during 7-8 February 2010 at CIFRI Barrackpore. Dr. M. V. Gupta, Chairman of the committee, members, RAC, Prof. A. P. Sharma, Director, CIFRI, Barrackpore, Heads of Division, and PIs and Co-PIs of the Institute's projects attended the meeting. Dr. M. K. Das, Member Secretary, RAC presented the Action Taken Report (ATR) on the recommendations of the previous RAC committee. After a brief discussion on ATR, it was accepted by RAC. Prof. Sharma briefed the activities and achievements of the Institute during 2009-2010. After that the Heads of Division and Programme Coordinators presented the progress of their projects. The committee expressed satisfaction on the development of the research conducted and suggested for further improvement.


### Research Advisory Committee Meeting

The meeting of the new Research Advisory Committee of the Central Inland Fisheries Research Institute was also convened during 23-24 April 2010 at CIFRI Barrackpore. Dr. R. K. Sinha, Chairman, RAC and Professor, Environmental Biology Laboratory, Department of Zoology, Patna University chaired the meeting. Dr. Samir Banerjee, Dr. L. L. Sharma, Dr. R. M. Dwivedi, Dr. P. Nautiyal, Dr. W. Vishwanath and Dr. V. V. Sugunan, the members of the committee also addressed the meeting. The Program Coordinators and Heads of all the Divisions and Regional Centers and all scientists also attended the meeting. The Program Coordinators presented the progress of research projects and future initiatives of the ongoing Institutional Programs/Projects, while the Principal Investigators presented the progress and achievements of various sponsored and consultancy/contract research projects for suggestions and direction from the RAC. The committee suggested several recommendations for improving the research activities of the Institute. The Chairman Dr. R. K. Sinha congratulated the scientists for carrying out good work of national and international relevance and expressed satisfaction in the wide coverage of all important aspects of inland open water fisheries in the projects. Director Dr. A. P. Sharma in his concluding remarks expressed that the RAC provided window for continuous interaction with experts in the field as members of the committee and assured that recommendations will be implemented. The meeting concluded with the vote of thanks.


### Institute Research Committee Meeting

The Annual Research Committee meeting of the Institute was held at Barrackpore during 03-06 May, 2010. Prof. A. P. Sharma, Director, and Chairman, IRC presided over the meeting. Dr. V. V. Sugunan, ADG (Inland Fishery) ICAR New Delhi, represented the Fisheries Division. The scientists of all cadre and heads of divisions attended and participated in this

important meeting. Dr. Sugunan advised that i) global research scenario is changing fast and scientists must follow the change, ii) Convergence of Institutional and external funded projects to complement and strengthen the Institutional activities, (iii) Outreach activities should be part of the Institutional programmes and scientist's man-month should include the outreach projects also, (iv) More interaction among scientists is necessary. Dr. Sharma also expressed satisfaction about the research progress and remarked: i) Scientists should interact more among themselves for better research output, (ii) The data collected by the Institute over the decades need consolidation incorporating the current information. The current year (2010-11) may be devoted for such compilation. (iii) Output from biotechnological research works should be more visible, iv) One book or monograph on riverine fisheries based on 50 years of research of CIFRI in many river systems in the country may be prepared, v) Standardization of technology for table size fish production in enclosures in reservoir and wetlands, vi) Cruise in estuarine region to generate more valuable data on its fisheries.

## Sundarban Diwas

CIFRI celebrated the 13th Sundarban Day on 3rd June 2010. Shri Subhas Naskar the Hon'ble Minister for Irrigation & Waterways, Govt. of West Bengal was the Chief guest. Over 325 participants including academicians, research scholars, line department officials, eminent scientists of ICAR institutes, Botanical Survey of India, DAVP and the representatives of NGO's actively participated in interactive sessions on importance of mangroves, issues and threats for Sundarbans bio diversity, and livelihood security in Sundarbans. Number of researchers and development workers expressed their opinions on these aspects.

## Blood Donation and free medical checkup Camp

CIFRI Recreation Club organized a Blood Donation Camp June 16, 2010. All the staff members and their family members took active part in the camp. At the camp 41 personnel donated blood including 35 CIFRI staff and six relatives of the staff. Free medical checkup was also organized at the occasion. The number of checkups/tests included 60 for sugar, 53 for ECG, and 75 for general Checkup. Gynecologist and Pediatrician also checked number of patients. The camp was a grand success.

## CIFRI Foundation day

The CIFRI Foundation Day celebrations were conducted during March 16-17 2010. The first day of the celebration included a brain storming session on research needs for inland fisheries. The session was chaired by Dr. V. V. Sugunan, Assistant Director General (Inland Fishery), Indian Council of Agricultural Research, New Delhi. Many dignitaries, namely, Dr. S. D. Tripathi, Dr. P. Das, Dr. Apurba Ghosh, *etc*. actively participated in the session besides technical and scientific staff of CIFRI. The session recommended for immediate research on fisheries enhancements towards livelihood and food security of inland fishers A quiz programme was also organised about CIFRI on the occasion. The proceedings of second day included a guest lecture by Dr. S. D. Tripathi, Former Director, CIFA, Bhubaneswar and CIFE, Mumbai.