

# CIFRI NEWS



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## Central Inland Fisheries Research Institute

### RAPID DETECTION OF FISH & PRAWN MICROBIAL DISEASES

The scientists of this institute, using molecular techniques like PCR and DNA probes hybridization technique, have developed and standardized rapid detection of *Aeromonas* spp., *V. parahaemolyticus* and WSSV.

#### Aeromoniasis

*A. hydrophila*, formerly known as *A. liquefaciens* or *A. punctata*, has been responsible for haemorrhagic septicemias, infectious dropsy, red mouth disease, red pest disease in fish. It is also associated with Epizootic ulcerative syndrome (EUS) in fish. Disease induction trial has shown that *A. veronii*, *A. veronii* b.v. *sobria* and *A. hydrophila* are pathogenic to fish and cause haemorrhagic/ulcerative skin lesions. Rapid detection of these pathogenic *Aeromonas* spp. in fish tissues is of prime importance. PCR has been standardized for detection of virulence gene 'hemolysin' in *Aeromonas* spp. and 'aer' gene (aerolysin) in *A. hydrophila*. In positive cases DNA band of 232 bp and 209 bp is amplified, respectively, and can be visualized on 2% agarose gel electrophoresis. The tests have been shown to be very rapid, sensitive, specific and helpful in disease diagnosis.



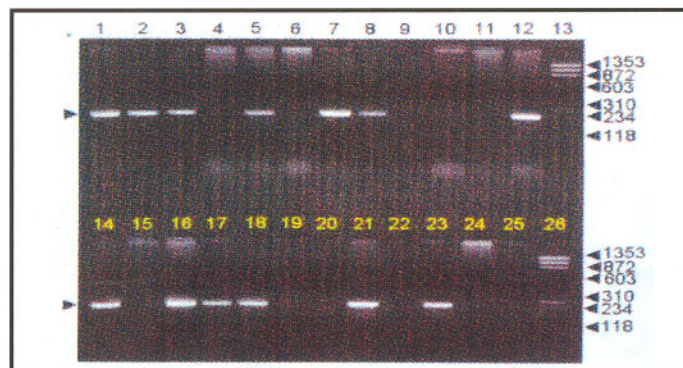
Ulcerative skin lesions

#### Vibriosis

Vibriosis has been a major factor causing mortality in juvenile prawns and cause high morbidity in farmed prawns. Most isolates affecting prawn appear to be *V. alginolyticus* and *V. parahaemolyticus* the former causing black spot, shell necrosis disease and bacterial septicemia in prawns. The bacterium produces hemolysin and causes lysis of erythrocytes in blood agar called Kanagawa phenomenon (K+). This is due to a thermo-stable direct hemolysin (*tdh*) encoded gene. This *tdh* gene has been used as marker for identification of K+ *V. parahaemolyticus* using PCR. The PCR amplified product of 623bp DNA can be enzyme labelled and used as DNA probe for specific detection of *V. parahaemolyticus*. This test has been known as DNA dot blot hybridization technique. The test has been shown to be highly sensitive and useful in rapid diagnosis of vibriosis in prawns.

#### WSSV in prawns

White spot disease (WSD) caused by White spot syndrome virus (WSSV) is one of the most serious disease of prawn. This disease has been responsible for mass mortalities under farm conditions resulting in severe economic loss in India and elsewhere. It affects prawns of all sizes, ages and culture systems. PCR test



Detection of virulent *Aeromonas* spp.





test has also been developed for detection of WSSV in prawn samples. However, considering some non-specific reactions or inhibitions in PCR test and to increase its specificity, DNA probe hybridization methods have been standardized at CIFRI, which is used for screening samples for WSSV.

### IMPACT OF FLOWS ON KRISHNA ESTUARY

Recent investigations conducted by CIFRI on ecology, biodiversity and production potentiality of Krishna estuary in Andhra Pradesh, revealed an alarming impact on the productive status of this important peninsular estuary. With the establishment of upper Krishna projects in Maharashtra, and Karnataka involving reservoirs viz., Srisailem and Nagarjunasagar, the water availability in the river downstream of Prakasam Barrage has dwindled. Further, in view of the requirement of water for irrigation and the Vijayawada Thermal Power Station, the gates of Prakasam Barrage remain closed resulting in complete drying up of the upper estuary bed. The seawater incursion into the riverine stretch has resulted in the ground water becoming saline. The increase in the salinity is due to reduction of freshwater river flows. Present investigation revealed the salinity amplitude in Krishna estuary to range from 20 to 35 ppt, a hyper-saline condition. During high tide, the seawater reaches up to Nadakudu covering about 90% of the tidal stretch. Only during monsoon the rainwater and discharges from Prakasam Barrage on account of attainment of full storage level, lowers the estuarine salinity. Thus the Krishna estuary at present is wholly a tide-fed, polyhaline estuary threatened by the absence of freshwater from the main river. Thus mullets are dominant in the catches (80%) and is represented by *Mugil cephalus*, *Liza parsia*,



Exposed middle stretch of Krishna estuary

and other species of *Liza* Clupeids, perches, sciaenids, catfishes, penaeid prawns and mud crabs (*Scylla serrata*) form the other groups. The marine catch includes mackerels, sardines and pomfrets. The catch per unit effort (CPUE) at Nagayalanka was estimated at 1.74 kg/boat/tide.



Prakasam Barrage

### MAJOR PROGRAMME HIGHLIGHTS

- *Catla catla* and *Labeo rohita* seed was reared in cages. After attaining average weight range of 4-5 g and registering a survival range of 52-71% the seed was released in Kabini reservoir in Karnataka as a part of the fishery enhancement strategy.
- Inventory and assessment of man-made reservoirs in Rajasthan using remote sensing data was undertaken and was corroborated with field observations for validity and model development.
- Pesticide monitoring of river Roopnarayan and Hooghly (Farakka to Haldia stretch) indicated the presence of 4,4-DDT at higher concentrations (upto 9.7 ng /l) than its permissible limits (1 ng /l) of EPAS (USA) for the aquatic organisms. But the organochlorine pesticide residue content, in fish flesh, was found to be meagre, in comparison to permissible limits prescribed for human consumption.
- Fish catch in Hooghly Estuary recorded a decline of 1608.1t compared to corresponding period last year with winter migratory catch at 875.6t and Hilsa catch at 665.6t respectively.
- Random amplified polymorphic DNA fragment patterns of Hilsa population from



Ganga drainage and Hooghly drainage indicated existence of two sub-populations of *Tilisha*

- A collaborative project between World fish Centre, Penang, Malaysia and CIFRI on "Community based management of Rice-fish farming with adaptive learning approach" was implemented at four locations viz., Moyna under Midinipur district, Kamardanga under Hooghly district, Malandighi under Burdwan district and Tangramari under North 24 Parganas district of West Bengal. The data generated on rice and fish farming plots depicted encouraging results. Fish production obtained from freshwater paddy fields were 600-800kg/ha/4-5 months whereas from brackish water paddy fields it was 1371 kg/ha (in 2 crops).

## IMPORTANT EVENTS

### REGULAR DIRECTOR AT CIFRI



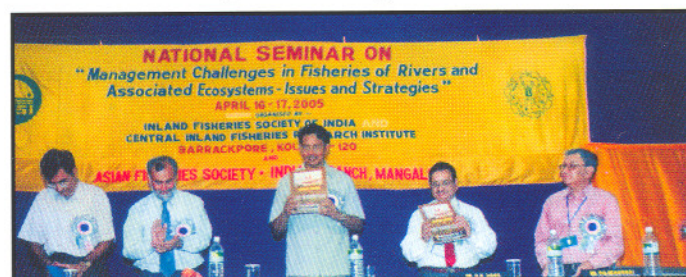
Dr. K.K.Vass took over the charge of Director CIFRI on January 29, 2005. Prior to this he was holding the position of Director, National Research Centre on Coldwater Fisheries between November 1997 to January 2005 for seven years, another ICAR

institute located at Bhimtal ( Nanital ) in the State of Uttaranchal. Dr.Vass is not new to CIFRI, he started his scientific career at the Estuarine Division of CIFRI at Barrackpore in the year 1972 and worked in various capacities contributing to R&D efforts of the institute till November 1997 when he left for NRCCWF, Bhimtal to take up the Directorship of that institute. Dr.Vass brings with him 31 years of research experience in aquatic ecology, open-water fishery, coldwater fishery and aquaculture, wetland fishery management and riverine environment including toxicology. During his long scientific career he visited many countries and had the opportunity to work at the Institute of Aquaculture, Iran; and visited Freshwater Biological Association , Windermere, U.K.; River Research Institute Dorset , U.K.; Institute

of Ecology, Edinburgh, U.K.; Asian Wetland Bureau, Malaysia among other important international organizations of aquatic ecology and fishery. The present engagement at CIFRI will be mutually rewarding both for him and the institute. The CIFRI staff warmly welcomes the regular Director.

## NATIONAL SEMINAR

The Institute in collaboration with Inland Fisheries Society of India organized a National Seminar On "**Management Challenges in Fisheries of Rivers and Associated Ecosystems: Issues and Strategies**" at Barrackpore, Kolkata on April 16-17, 2005. Dr. Mangala Rai, the Secretary DARE, Govt. of India and Director General, ICAR inaugurated the seminar.



### Release of publications

The seminar was attended by a large number of dignitaries besides many renowned fishery scientists, water managers/ engineers, professors, NGO's and personalities involved in open-water fishery management. About 250 delegates from different parts of the country attended the seminar. The Society organized a Memorial lecture during the seminar to honour late Dr. T.V.R Pillay, a great promoter of aquaculture at global level, which was delivered by Prof. M.N. Kutty. On this occasion Dr. Mangala Rai released six publications, three in Hindi and three in English apart from the Seminar Souvenir. The society awarded fellowships to eminent scientists Prof M. N. Kutty ; Prof. BrijGopal; Prof S. K. Konar; Shri Apurba Ghosh and Dr. B. N. Saigal. An exhibition, Aqua Expo-2005 organized on the occasion was inaugurated by Mrs. S. Pillay. The technical sessions deliberated on the major themes like river systems and water management; aquatic resources, biodiversity and environment, fisheries enhancements, stakeholders and policies and an action plan were also proposed. Based on the recommendations of the technical sessions, a declaration was adopted to "**Ensure Water for Ecosystem and Fish**"



## REGIONAL COMMITTEE ZONE-II

The XVIIth Meeting of the ICAR **Regional Committee No. II** was held on 24-25 June, 2005 at CIFRI, Barrackpore under the Chairmanship of Dr. Mangala Rai, Secretary, DARE & Director General of ICAR. A host of dignitaries viz. one Minister each from the States of West Bengal and Assam, Members of ICAR GB and Society, Vice Chancellors of SAUs, DDGs and ADGs from ICAR, Directors of ICAR Institutes, State officials and Scientist-in-charge of ICAR stations located in the region attended the meeting. Sri Anisur Rahman, Hon'ble Minister of Animal Resource Development, Govt. of West Bengal was the Chief Guest and Sri Gobind Ch. Langthasa, Hon'ble Minister of Veterinary, Govt. of Assam was the Guest of Honour. Sri Mehboob Zaidhi, Member of Parliament (LS) and Member, G.B (ICAR) and Sri Harishankar Prasad, Member ICAR society also graced the occasion. After the formal inaugural function the Chairman, Dr. Mangala Rai, reviewed the progress of work of the region under each crop / commodity / discipline from entire ICAR system and invited responses and interaction from SAUs and State Departments on the issues related to agriculture development, research, extension and education. The meeting ended with the formulation of recommendations and action points for implementation during the next two years. It concluded with the vote of thanks proposed by the member secretary Dr. K. K. Vass, Director, CIFRI.

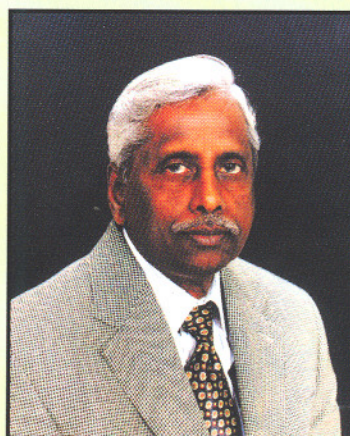


Dr. Mangala Rai, Chairman addresses the R.C.M.

## CIFRI BAGS AN INTERNATIONAL PROJECT ON RESERVOIR

The Consultative Group on International Agricultural Research (CGIAR) under its Challenge Programme on Water and Food (CPWF) has approved a mega project "Improved fisheries productivity and management in tropical reservoirs" to CIFRI, Barrackpore through global competitive bid for research grant schemes. The interdisciplinary project has an overall aim of increasing the productivity of water and providing sustainable livelihoods to rural poor through improved fisheries management in tropical reservoirs. Dr. S. Ayyappan, DDG (Fy), ICAR, New Delhi is the project leader with CIFRI Barrackpore as the lead centre. The other international partners in the project are: Lake Nasser Development Authority, Aswan, EGYPT; National Institute Of Oceanography and Fisheries, Cairo, EGYPT; Water Research Institute, Achimota, GHANA; Department of Fisheries and Marine Biology, University of Bergen, NORWAY and World Fish Center, Penang, MALAYSIA. A team of six CIFRI scientists including three biologists, one economist, one chemist and one statistician are involved in the project. The Letter of Agreement has already been signed between CPWF and ICAR for implementation of the project. The work programme is being implemented as per schedule. The project is expected to provide a momentum to the development of reservoir fisheries in India.

## FORMER CIFRI SCIENTIST RECEIVES AN INTERNATIONAL PRIZE



Dr. Modadugu V Gupta, former Scientist of CIFRI, initiated his scientific research on Aquaculture at CIFRI in 1971 and served the institute with distinction up-to 1977 before joining UN-ESCAP. Since then his



career has been an illustrious one, serving prestigious organisations like UN-ESCAP, FAO and World Fish Center in different countries in South east Asia and Africa. He rose to the position of Assistant Director General of World Fish Centre till his recent retirement. Through his untiring efforts, fresh water fish production has risen three to five times and small-scale aquaculture has become a viable means of livelihood for over a million poor farmers and women. His outstanding contribution in alleviating the nutritional status of over a million people through expansion of aquaculture and fish farming in South and Southeast Asia and Africa, has enabled him to bag the prestigious World Food Prize of \$ 250000. It is a reward for his sustained research efforts and an honour to an Indian scientist. The CIFRI family feels proud and conveys warm greetings to Dr. Gupta on his world-class achievement. We wish all happiness and many more successes to Dr. Gupta and his family.

## ICAR ZONAL SPORTS MEET

The CIFRI contingent participated in different events at the ICAR Sports Meet Zone III organized by CRIJAF, at Yuva Bharati Kirangan, Salt Lake, Kolkata during 14-18 January 2005. The institute staff put up a



Best Athlete Award to Shri M. Roy

sterling performance and Shri M. Roy bagged the Best Athlete Award at the a Meet. Mr. Limba Ram an Olympian gave away the prizes to the winners of different events.

## MEETINGS

### Research Advisory Committee

Research Advisory Committee of the Institute met at Barrackpore on 24-25 January 2005 under the chairmanship of Dr. K.V. Devaraj, former V.C., University of Agricultural Sciences, Bangalore. The



RAC Meeting in progress

other members of the committee who attended the meeting are Dr. B.N.Singh, Ex-DDG (Fy), Dr. V.R. Desai, Ex-Director CIFRI and Prof. B.B. Jana. All Heads of Divisions and scientists of the Institute participated in the deliberations. The RAC reviewed the progress of work under each project and suggested certain modi-fications and areas of work to be addressed in future. The committee also took the opportunity to discuss in detail the revised draft of VISION-2020 document of CIFRI. They gave valuable suggestions to update the document.

### CIFRI-DAC

Second Technical Monitoring Committee meeting on **Strengthening of Database and Information Networking for Fisheries Sector** was held at CIFRI, Barrackpore on January 31, 2005. Shri A.K. Bhattacharya, (IAS), Joint Secretary, Fisheries, Department of Animal Husbandry and Dairying, Ministry of Agriculture, Govt. of India New Delhi chaired the opening session of the meeting and reviewed the implementation of project.

Dr. S.D. Sharma, Director, IASRI, New Delhi as chairman of the technical monitoring committee, apart from delivering keynote address critically examined the progress of each State and other partners involved



in this important project sponsored by the DAHD&F. Shri Rajpal Singh Kahlon, IAS, Secretary, Department of Fisheries, Govt. of West Bengal, Kolkata attended the meeting and addressed the participants of this technical monitoring committee. The meeting was also attended by senior officers from the Ministry DAHD&F, Planning commission,



CIFRI - DAC meeting in progress

majority of participating State Fisheries Departments, Fisheries Survey of India (FSI), National Sample Survey Organisation (NSSO), Shri S.K.Mandal and Dr. R.K.Tyagi from CIFRI. The Director Fisheries from Haryana and West Bengal attended and gave presentation at the meeting. Dr. K.K. Vass, Director, CIFRI, apart from welcoming the dignitaries, and delegates to this important meeting, gave his remarks highlighting the contribution of CIFRI in the entire project implementation effort. Dr. Sharma, the Chairman, TMC expressed his thanks to Dr. K.K. Vass and his scientists for organizing the second meeting of TMC at CIFRI, Barrackpore.

### Inception meeting - Challenge Programme on Water and Food project.

Inception meeting of the Challenge Programme on Water and Food (CPWF) project "Improved fisheries productivity and management in tropical reservoirs" was held at CIFRI, Barrackpore during March 21-23, 2005 to prepare, clarify and discuss the issues of project implementation. The meeting was attended by Dr. K. K. Vass, Director, CIFRI, Barrackpore, Dr. Chris Bene, Research Scientist, World-Fish Centre, Cairo, Mr. Marco Blixt, International Water Management Institute, Colombo, Dr. Abul Haris, representative of Indo-Gangetic (IG), Basin Co-

ordinator, ICAR-RCER, Patna and project scientists of the institute. After detailed discussions Gantt Chart, responsibilities of partners, activity time schedule, budget and managerial aspects and action plan of the project were finalised and sent to CPWF secretariat, at International Water Management Institute, Colombo.

### INTERACTION OF FISHERY SCIENTISTS FROM OTHER ICAR INSTITUTE

A meeting of Fisheries scientists working in other divisions of ICAR was convened on 9<sup>th</sup> April by the DDG (Fy), at CIFRI, Barrackpore to discuss and know the research activities the scientists are carrying out in their respective institutes. Based on their inputs, the Fisheries Division would assess the kind of support that can be extended to them through mainstream fishery institutes. Fourteen fishery scientists from seven ICAR research Institutes viz., ICAR Research Complex for NEH Region, Barapani; ICAR Research Complex, Goa; Central Agricultural Research Institute, Port Blair; ICAR Research Complex for Eastern Region, Patna; Central Soil and Water Conservation Research and Training Institute, Dehradun and Indian Veterinary Research Institute, Izatnagar participated in the meeting. All the Heads of Divisions of CIFRI at Barrackpore, apart from the invited scientists, attended the meeting and participated in the discussions. The meeting provided an opportunity to assess the strength and weakness of each. Different suggestions were put forth in the meeting to improve the quality of fishery research at these non-fishery institutes. At the end different participants formulated definite recommendations and action points for implementation. The CIFRI has



Interaction of fishery scientists with DDG (FY)



been made the nodal institute to co-ordinate the activities. The DDG (Fy), Dr. S. Ayyappan expressed satisfaction at the response of the participants and thanked the respective Directors for deputing the fishery scientists to participate in this important meeting. Dr.K.K.Vass thanked DDG(Fy) for convening this meeting at Barrackpore and involving CIFRI . On behalf of DDG (Fy) the recommendations and action points have been circulated by Director CIFRI, to all on 26th April 2005.

## STAFF RESEARCH COUNCIL

The Annual Staff Research Council meeting of the Institute was held between 18 to 20 April 2005 at CIFRI, Barrackpore. Dr. K K Vass, Director chaired the meeting and Dr.V.R.Chitranshi ADG (Fy) represented the Fisheries Division, The progress of work on all the research projects for the year 2004-2005 of the Institute was presented by respective project leaders. After critical review and elaborate deliberations the project programmes for 2005-2006



SRC meeting, address by Chairman

were approved. Apart from the projects the respective scientists also discussed the administrative and financial issues with the representatives from institute administration and finance. The revised VISION-2020 was also discussed with scientists.

## PUBLICATIONS

During the period following publications were brought out by the institute on various topical themes in capture fisheries for different users.

- ◆ CIFRI News letter, Vol .9 No. 2 July-December 2004
- ◆ Fisheries and Environment assessment in selected backwaters on South-West coast of India. Bull. No.139
- ◆ Fisheries of selected prawn species in Kayamkulam backwaters. Bull. No.140
- ◆ CIFRI-An Introduction. Bull. No. 143
- ◆ CIFRI Training calendar for 2005-2006
- ◆ Proceedings and Recommendation of National Seminar held at CIFRI in April, 2005.

## TRAINING & AWARENESS

During the period the CIFRI at its headquarters, Barrackpore (Kolkata) and divisional / regional centres at Allahabad , Bangalore , and Guwahati carried out fifteen training and awareness programmes in the States of West Bengal , Uttar Pradesh, Assam and Karnataka. The programmes focussed on Pen Culture, Cage Culture, Ornamental fishery, Mangrove ecology, Riverine seed collection and conservation. Fishers, state officials, NGO's and students attended these programmes.



Training programme in U.P.



Training programme in W. Bengal





Training programme in Karnataka

## HONOURS & AWARDS

Dr. K.K.Vass has been elected a Fellow of the National Academy of Agricultural Sciences on 1st January 2005. Dr. M.S.Swaminathan, the President of



Dr. K. K. Vass receives the fellowship award from Dr. M. S. Swaminathan

Academy, awarded the Fellowship to Dr.Vass during the Annual Day Celebration of Academy held at NASC complex, New Delhi on June 05, 2005.

## FOREIGN VISITS

- Dr. U. Bhaumik, Principal Scientist, participated in the Inception Workshop on community-based fish culture in irrigation systems and seasonal flood plain (CPWF Project No. 35) held at World Fish Centre, Penang, Malaysia during June 7-10, 2005.
- Dr. P. K. Katiha, Sr. Scientist, participated in a face-to-face Workshop at Imperial College, London, during 20 - 21 June 2005 to finalize the outlines of the chapter "Inland Fisheries and Aquaculture" in a book "Water use and water productivity in the context of Integrated Water Resource Management" to be published by Comprehensive Assessment of Water for Agriculture (CA), International Water Management Institute, Colombo, Sri Lanka in collaboration with The World Fish Center, Penang, Malaysia..
- Dr. Biswajit Dash Tech. (T-4) returned after completing his study on Fisheries (Aquaculture) in China under the Chinese Scholarship Scheme (2004-2005) . He worked on "Development of bacterial biofertiliser for sustainable freshwater aquaculture" at College of Life science and Biotechnology, Ningbo University, Ningbo, China.

## VISITORS

**The following distinguished persons visited the institute during this period**

- Shri Anisur Rahman, Hon'ble Minister for Animal Resources, Govt of West Bengal.  
Shri Mehboob Zaidhi, Hon'ble M.P. and GB Member, ICAR  
Shri Gobind Ch. Langthasa , Hon'ble Minister of Veterinary , Govt. of Assam  
Dr. Mangala Rai, Secretary DARE, GOI and DG, ICAR.  
Dr. Dipak Bagchi, V.C. BCKKV, West Bengal.  
Dr.R.C. Baghail, V.C., AAU, Guwahati





Dr. Mrinal K.Mazumdar, V.C., Uttar Bangha Agricultural University, Cooch Behar  
 Dr.A.K.Bandyopadhyay, V.C., West Bengal University of Animal and Fishery Sciences  
 Dr. Mark Prein, Project Leader, World Fish Centre, Penang.  
 Dr. Madan Dey, Director, World Fish Centre, Penang  
 Dr. Robert Arthur, Scientist, MRAG, London.  
 Dr.Chris Bene, World Fish Centre, Cairo  
 Mr. Marco Blixt, IWMI, Colombo  
 Dr. S. Ayyappan, DDG (Fy) ICAR  
 Dr. J.S.Samra, DDG (NRM) ICAR  
 Dr. V.K.Taneja, DDG (AS) ICAR  
 Dr. P. Das, DDG (AE) ICAR  
 Dr. Nawab Ali DDG (Engg) ICAR  
 Dr. J.K.Katyal DDG (Edu) ICAR  
 Dr. P.V. Dehadrai, Ex. DDG (Fy), ICAR  
 Dr. S.D. Tripathi, Ex. Director, CIFE  
 Prof. H.P.C. Shetty, Ex. Director of Instruction, Fisheries College, Mangalore  
 Mrs. Sarojini Pillai, Ex-Scientist, CIFRI  
 Dr. M.Y. Kamal, Ex-V.C., Sher-E-Kashmir Agricultural University, Srinagar  
 Shri Hari Shanker Prasad, Member ICAR Society.  
 Dr. R.C. Maheswari ADG (Tc) ICAR  
 Dr. K.S.Khokar, ADG (PIM) ICAR  
 Dr. S.N. Pandey ADG (Hort) ICAR  
 Dr. N.B. Singh ADG (Crops) & Agriculture Commissioner, GOI  
 Dr. H.S. Sen, Director, CRIJAF, West Bengal.  
 Dr. S.K. Bhattacharya, Director, NIRJAFT, Kolkata  
 Dr. S.K. Biswas, Director, Jute Development Corporation, Kolkata

### Superannuation

Ms. Anjali De (T:7-8) : 31.01.05  
 Shri H. Chaklader (T:5) : 31.01.05  
 Shri R.N.Tiar (SSG: IV) : 31.01.05  
 Shri Alope Sarkar (T: 6) : 31.01.05  
 Shri S.G. Biswas (T:1-3) : 31.01.05

### Promotion

Shri D.K. De Sarkar : AAO from 06.01.05  
 Shri R.K. Roy : LDC from 13.05.05  
 Shri Goutam Pathak (T: 7-8): From 01.07.2001

### Transfer

Shri V.S. Subramaniam : Joined at NAARM, Hyderabad on transfer  
 Shri A.K. Goswami (T:2) : Barrackpore to Guwahati  
 Shri B.P.Samanta (SSG:II) : Kakdwip to Barrackpore  
 Shri B.P. Mishra (SSG:II) : Kakdwip to Barrackpore

The CIFRI family warmly welcomes the new entrants at Barrackpore and hope that the excellent working atmosphere and warmth of staff will help them to adjust to the new place and contribute to the growth of the institute. We also wish happy and healthy retired life to our colleagues who superannuated during the period. Our congratulations are to members of staff who got promotions during the period, this will provide them further incentive to contribute more to the institute.

## STAFF NEWS

### New Entrants

Dr. K.K. Vass : Joined as Director on 29.01.05 (F.N),  
 Shri S.R. Das : Joined as P. Scientist on 21.04.05 (F.N), on transfer from CIBA  
 Shri Z.H.Khilji : Joined as Finance & Account Officer on 25.05.05 (F.N) on transfer from IARI

### Obituary

*The members of staff of CIFRI express their deep sense of sorrow at the sudden and untimely demise of Sri K. Subbaiyan (SSG:II) : (Coimbatore), whose tragic end came on 23.05.05.  
 May the departed soul rest in peace.*







## Director's desk

Dear Reader,

The capture fisheries management is a big challenging task in view of the progressive decline in availability of fresh-water in ecosystems and its deteriorating quality. Apart from this the production estimates are at times difficult to delineate in view of the diffused and varied nature of catches including their marketing. If one looks at the global scenario the picture is not very encouraging, there is more focus on aquaculture. According to (FAO 2004) about 34 million tons from lakes, reservoirs, rivers, and wetlands constitute about 25% of the reported world fisheries production in 2003. This directly and indirectly supports the livelihoods of millions of people, 95% of whom are from developing countries (FAO 2004). Furthermore, it is contended that the officially reported catches are under-estimated, especially in rivers where the contributions of different species from the smaller tributaries are generally overlooked. Despite its significant productive potential there is very little recognition of freshwater-dependent open-water fishery. Several factors contribute to this. In comparison to industrial marine fisheries this freshwater sector does not contribute to the export trade. The majority of the freshwater fisheries are artisanal small-scale, mostly associated with developing countries, and are often perceived as being a low-value activity and difficult to manage, thus have received scant attention at the international and national levels. The management models in fisheries science is dominated by theory and applications derived from developed industrial fisheries, which in majority of the cases do not fit in developing countries. The tendency for development

agencies is to focus on aquaculture means and capture fisheries tend to get ignored. At CIFRI we are engaged in this challenging task of developing technologies / strategies to sustain the fish stocks at the present level of exploitation on one hand and on the other, make R&D efforts to increase the existing contribution to total inland fish yield in years to come. I am hopeful that the scientists of CIFRI will re-dedicate themselves to this important task. Editors have tried to give a new look to CIFRI-NEWS, opinion of all readers is sought to further improve it.

*K. K. Vass*