



**NRCCWF**

**NEWS**

National Research Centre on Coldwater Fisheries  
Bhimtal - 263136 (District Nainital): Uttarakhand

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## **DR. MANGALA RAI TAKES OVER AS THE SECRETARY, DARE AND DG, ICAR**



The Director and staff of NRC on Coldwater Fisheries, Bhimtal wishes their hearty congratulations to Dr. Mangala Rai on his assuming the office of the Secretary DARE, Government of India and Director General, Indian Council of Agricultural Research on 9th January 2003. Born in a farm family he specialized in Genetics

and Plant Breeding and was awarded Ph.D. degree in 1973. He was conferred D.Sc. degree (*Honoris causa*) in 1999 by CSAUA&T, Kanpur for his significant contribution in the field of agriculture. Dr. Rai started his professional career as Plant Breeder and held several important positions in NARS such as Assistant Director General (Seeds), Assistant Director General (Policy and Perspective Planning) and held the position of Deputy Director General (Crop Science) since 1997. He has also held other important positions in agricultural management from time to time. He has widely travelled and has

visited 23 countries in connection with different scientific assignments. He shouldered several important National responsibilities as Chairman of different high level Committees. At International level he discharged many responsibilities as Chairman of Asian Maize Biotechnology Network, International Sunflower Research Network, SAARC and SAIC Governing Board; as Member of CIMMYT Board of Trustees, Member Steering Committee of SysNet, IRRC and SAARC Technical Committee and as Regional Secretary of SABRAO. Dr. Rai is Fellow of several Scientific Societies and has published more than 200 papers and several books. Dr. Rai is known for his dynamic leadership. Under the directives and the able guidance of Dr. Rai, through his innovative research concepts and policy initiatives, ICAR will attain new heights to face the challenges in agricultural sector both at national and international level. The NRCCWF family rededicate ourselves to work hard to achieve the goals and objectives of our Director General.

Director  
and staff members of NRCCWF

## **NEW DDG JOINS FISHERIES DIVISION AT ICAR**



Dr. S. Ayyappan has taken over as the DDG (Fisheries) ICAR after superannuation of Dr. K. Gopakumar. He assumed the charge on 1<sup>st</sup> August 2002. Dr. Ayyappan has joined the ICAR services in 1978, prior to the present assignment, he held the positions of Director, Central Institute of Freshwater Aquaculture, Bhubaneswar and Director, Central Institute of Fisheries Education, Mumbai.

He is an internationally renowned aquaculture scientist, widely travelled in many foreign countries. He has been on the expert panels of various National and International Committees. Dr. Ayyappan has more than 150 publications including books and research papers. He has been awarded fellowships by many academic and professional societies. During a short span of his career he has given a new direction to the aquaculture in the country. The members of staff of NRCCWF wish the new DDG all success and pledge their support and commitment to take the fishery sector to the new heights under his leadership.

## COLDWATER ISSUES/VIEWS

### Scope of Ornamental Fishery in Western Himalayas

In western Himalayas, this resource so far has not been exploited for commercial purposes, though a great potential of these fishes exists in the region. Because of the small size and least food value in the market, the ornamental fishes could not attract local fisher folk to exploit this fishery for market. Since the entrepreneurial awareness is yet to develop in the region, the collection of basic data on ornamental fishery and its potential is the pre-requisite to formulate long-term strategies for the development of ornamental fish trade in the region.

### Ornamental fishery resources

Almost all the streams and tributaries of the rivers Ganga and Indus systems are the best resources of ornamental fishes in the western Himalayan region. They include the Alaknanda, Yamuna, Ganga, Bhagirathi, Kali, western Ramganga and Saryu drainages in Uttaranchal, Yamuna, Beas, Sutlej, Ravi, Tawi and Chenab drainage in Himachal Pradesh and Indus, Jhelum, Chenab and Ravi drainages in Jammu and Kashmir. The lacustrine resources of ornamental fishes mainly include the valley lakes and mountain lakes available in these states. Among these Dal, Wular and Mansabal (J&K), Renuka (HP) and famous Kumaon lakes of Uttaranchal are important. A few fish species of ornamental value are also known to inhabit the man-made reservoirs with water spread area of about 44000ha in these states. Among 258 fish species recorded from Indian uplands about 218 species inhabit the Himalayan waters. Of the 164 fish species reported so far from western Himalayan resources more than 100 varieties of fishes are known for their ornamental value.

### Important ornamental fishes

#### Barilids

*Barilius bendelisis*  
*Barilius vagra*  
*Barilius shaera*  
*Barilius barila*  
*Barilius barna*  
*Raimus bola*

#### Danios

*Danio devario*  
*Brachydanio rerio*  
*Esomus danricus*  
*Rashora daniconius*  
*Rashora rashora*

#### Barbus

*Puntius chola*  
*Puntius conchoniis*  
*Puntius sarana*  
*Puntius ticto*  
*Puntius sophore*

#### Sisorids

*Glyptothorax conirostris*  
*Glyptothorax garhwali*  
*Glyptothorax kashmirensis*  
*Glyptosternum pectinopterus*  
*reticulatum*  
*Pseudecheneis sulcatus*

#### Minor carps

*Chrossocheilus latius*  
*Garra gotyla gotyla*  
*Labeo dero*  
*Labeo dyocheilus*

#### Cat fishes

*Channa marulius*  
*Channa striatus*  
*Channa gachua*  
*Belone cancila*  
*Notopterus notopterus*

#### Loaches

*Botia almorhae*  
*Botia birdi*  
*Botia lohachata*  
*Noemacheilus botia*  
*Noemacheilus corica*  
*Noemacheilus kangrae*  
*Noemacheilus montanus*  
*Noemacheilus punjabensis*  
*Noemacheilus rupicola*  
*Noemacheilus stoliczkae*  
*Amblyceps mangois*

### Development of ornamental fishery

At present the market share of India in global trade of ornamental fishes is only 0.007% and NEH region is the only stakeholder in this trade with 85% share. The rest 15% trade is held by southern states with some exotic and marine varieties. In western Himalayan states i.e., Jammu and Kashmir, Himachal Pradesh and Uttaranchal, the ornamental fish trade is virtually absent, though there is tremendous scope for the development of this trade with variety of fishes inhabiting the streams and natural lakes of the region. To evaluate the possibilities of developing an organized trade of ornamental fishes in the northwest Himalayan states, the proper planning and perfect strategies would have to be formulated with a focus on identification of potential resources of ornamental fishes, location of natural spawning grounds, fabrication of suitable gears for collection, transportation, marketing and export, selection of suitable ornamental fish species for artificial propagation, biological investigation with regard to food and feeding, growth, maturity, fecundity and reproduction, artificial breeding and raising of adults.

C.B Joshi

## SUCCESS IN PADDY-CUM-FISH CULTURE IN ARUNACHAL PRADESH

In the Lower Subansari District the zero area has very important Apatani Plateau populated by the local tribe of the same name. This Plateau is 26 km<sup>2</sup> in area and situated at 1524 masl in the latitude of 26 to 28° N with summer temperature in the range of 6.3-28.1°C and winter temperature in the range of 1.5-12.5° C. The Paddy cultivation is the main agriculture activity in the plateau. With the efforts of State Fisheries Department cultivation of fish in the paddy fields with local improvisation has proved to be very encouraging. Three approaches are followed, first fish as a second crop after paddy, second fish being reared with paddy and the third fish and paddy in rotation. The candidate species for this cultivation is common carp, *Cyprinus carpio*. The growing period of fish range between 3-4 months, the estimated yield is in the



range of 150-200 kg/ha. About 350 ha area of paddy field has been brought under this culture system and it is proposed to extend this coverage to 512 ha area. This concept of paddy-cum-fish integration in this region has given additional income to the farmers. This success story in Zero region needs to be tried in other regions

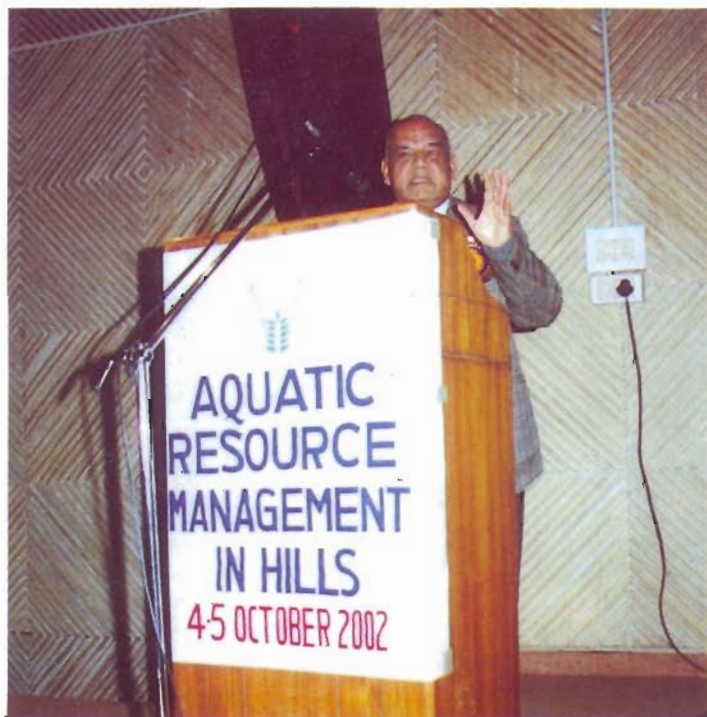
of the State. This programme has received appreciation from planner at Govt. of India level. Through the NRCCWF-NEWS effort has been made to focus this success story to fishery fraternity across the country.

*The Secretary Fisheries, Govt. of Arunachal Pradesh*

## NRCCWF ORGANIZES A NATIONAL SEMINAR



The National Seminar on Aquatic Resource Management in Hills was organized by NRCCWF in collaboration with the Society of Biosciences, Muzaffarnagar; UTDASP, Government of Uttaranchal and National Institute of Ecology, Jaipur at the Administrative Training Institute, Nainital from October 4-5, 2002. The chief guest at the inaugural function was Shri. Mantri Prasad Naithani Ji, Minister of Animal Husbandry, Dairying, Co-operatives and Fisheries, Government of Uttaranchal. Dr. S.N. Dwivedi Ex-Director General, MPC&T, Bhopal; Ex-Director, CIFE, Mumbai; Ex-Additional Secretary, Government of India; presided over the



function. Other guests of honour at the function were Dr. S.A. H. Abidi, Member ASRB, New Delhi; Dr. P. V. Dehadari, Former



DDG (Fy), ICAR, New Delhi; Dr. S. Ayyappan, DDG (Fy), ICAR, New Delhi; and Dr. V.P. Agarwal, Secretary General, Society of Biosciences, Muzaffarnagar. At the inaugural function the Chief Guest felicitated eminent fishery scientists of the country and also released a Book on "Hill Fisheries & Aquatic Resource Management" edited by Vass & Raina. Dr. Dwivedi and Dr. Dehadrai released other publications on this occasion. At this function the Best Fish Farmer Award was presented to Shri Krishna Nand Gahtori by the Hon'ble Minister Shri Naithani Ji, for his achievement in fish farming in hills under the technical guidance of NRCCWF. The Chief Guest after his address to the participants inaugurated the "MATSYA PRADERSHANI" organized specially for the seminar. Other dignitaries who attended the seminar were Dr. B.N. Singh, Ex-DDG (Fy), ICAR, New Delhi; Dr. D.P.S. Chauhan, Dy. Commissioner, Fisheries, Govt. of India; Dr. G.P. Dubey former Director, Madhya Pradesh State Fisheries Department, Bhopal, Dr.

Saharan, Director Fisheries, Govt. of Haryana; Dr. Brij Gopal, Secretary General, National Institute of Ecology, Jaipur; Dr. K.L. Sehgal, former Director, NRCCWF, Bhimtal; Dr. D.P. Zutshi, Former Director, COD, Kashmir University, Srinagar (J&K) Dr. V.V. Sugunan, Director, CICFRI, Barrackpore, West Bengal; Dr. D.



Kapoor, Director NBFGR, Lucknow; Dr. V.R. Chitranshi, ADG (Ify) ICAR, New Delhi; Shri S.N. Ogale, Manager (Environment), Tata Power Company Limited, Lonavla, Maharashtra; Shri. Vijay Soni, President Anglers Association, Delhi; Dr. U.P. Singh, present Dean and Dr. C.S. Singh, former Dean, College of Fisheries, University of Agriculture and Technology, Pantnagar; Prof. Sarvesh Kumar, Prof. S.P. Singh, and Prof. P.K. Gupta of Kumaon University. There were about hundred registered participants. During two days, seminar apart from inaugural session, special lectures, three, technical sessions, young scientist presentation session and the

Shri. Govind Singh Kunjwal, Minister for Industries, Government of Uttaranchal visited NRCCWF, Bhimtal on July 5, 2002.

Dr. R.S. Tolia, IAS, Principal Secretary and Commissioner Department of Forest & Rural Development, Government of Uttaranchal visited the Institute, inspected the Mahseer Seed Production Unit, Bhimtal on August 22, 2002. He was briefed by the Director about various research and extension activities. Dr. Vass also made a presentation. Dr. Tolia evinced keen interest in NRCCWF activities, and desired a close co-operation between NRCCWF and State Fisheries Department for the fishery development in the State of Uttaranchal. Dr. Tolia was accompanied by Chief Development Officer, Nainital and other District authorities.

Dr. S. Ayyappan, DDG (Fisheries), and Dr. V.R. Chitranshi, ADG (Fisheries), ICAR, New Delhi inspected the upcoming new building complex of the Institute at Bhimtal on October 5, 2002.

Lt. Colonel Amitab Negi, Commandant NCC Battalion, Almora visited the Chirapani Experimental Fish Farm, Champawat on October 22, 2002.

Dr. R.M Acharaya, former DDG (Animal Science), ICAR, New Delhi, Dr. R.L. Sharma, Dean (Retd.) Horticulture Univer-

plenary session were held. At the Young Scientists Award session, sponsored by the Society of Biosciences, the panel of judges adjudged the presentation given by Shri. A.K. Nayak, Scientist NRCCWF, as the best and recommended him for the award at the next seminar of Society.



The plenary session conducted on October 5, 2002 was chaired by Dr. S.A.H. Abidi, Member, ASRB, ICAR, New Delhi. The recommendations, based on the two-day deliberations and the reports submitted by different sessional chairpersons, for the development of hill fisheries and aquatic resource management, were discussed in detail, finalized and approved by the house. After successful conclusion of debate the Chairman desired that the approved recommendations of this important seminar should be printed by NRCCWF and circulated to all concerned for formulating an action plan. Dr. Abidi in his concluding remarks congratulated the Director and Staff of NRCCWF for excellent conduct of this seminar.

## VISITORS

sity, Solan and Dr. V.N. Sharda, Director, CSWCRT&1, Dehradun, Members of SAP of NATP for Hill & Mountain Ecosystem and Dr. Tyagi, PPSS NATP (H&M), CSWCRT&1, Dehradun, visited the Mahseer Seed Production Unit, Bhimtal on November 29, 2002. They were apprised by the Director and the PI (NATP) about the achievements of NATP at NRCCWF.

Shri. J.C. Joshi, Chief Development Officer, Champawat visited the Chirapani Experimental Fish Farm, Champawat on November 30, 2002.



## EXTENSION/TECHNOLOGY TRANSFERRED

Both theoretical and practical training was imparted to State Fisheries personnel from Nagaland on various aspects of Hill Fisheries Aquaculture, Openwater Fisheries Management and

Conservation at NRCCWF Bhimtal between July 29 to August 8, 2002.

## EVENTS AND CELEBRATIONS

### Hindi pakhwada

Institute celebrated the Hindi week from September 14-21, 2002



at Bhimtal. During this week various Hindi related activities were organized. Essay writing and drafting competition in Hindi was conducted among the staff members of the Institute. The staff members participated in the events with great zeal and the winners were awarded prizes.

### Awareness to young-ones

The students, teachers and the Principals of ABC Alma Mater School, Champawat and Universal Green School, Champawat visited the NRCCWF farm complex on November 14, 2002 on the occasion of BAL DIVAS. Dr. K.D. Joshi briefed the visitors about various fish species kept at the farm, their feeding habits, economic importance, sport value and need for their conservation.

## MEETINGS

### Uttaranchal Fishery Act

As per the Uttaranchal Govt. notification a committee was constituted to draft out the Fisheries Act for the State. The committee comprised Dr. K.K. Vass, Director, NRCCWF; Dr. U.P. Singh, Dean, Fisheries College, G.B. Pant Agriculture University; Dr. Kum Kum Shah, Department of Zoology, Degree College, Pithoragarh and Shri S.R.Chaniyal, Jt. Director, Uttaranchal Fisheries. The other co-opted members were Dr.C.B.Joshi, Dr. Shyam Sunder, Principal Scientists NRCCWF and Dr.R.C Pokhariyal, Asstt. Director, Uttaranchal Fisheries. The committee held detailed discussion at NRCCWF Bhimtal between August 16-24, 2002. The draft of Fisheries Act was prepared and sent to the Additional Secretary (Fisheries) Govt. of Uttaranchal for finalization and approval of the competent authority in the Government.

### Research Advisory Committee

The Research Advisory Committee meeting was held on October 3, 2002 under the Chairmanship of Dr. S. N. Dwivedi, former Director General, MPCS&T, Bhopal; former Director, CIFE, Mumbai; Former Additional Secretary, Government of India. Other members of the committee who attended the meeting were Shri. S.N. Ogale, Manager (Environment), Tata Power Company Ltd; Lonavla; Dr. U.P. Singh, Dean, College of Fisheries, G.B. Pant Agriculture University; and Dr. V.R. Chitranshi, ADG (IFy), ICAR, New Delhi. After brief welcome by Dr. K.K. Vass, Director, and the introductory remarks by the members of the committee the progress made under each research project of the Institute for the

year 2001-2002 was discussed. The Chairman and the members of the committee were satisfied with the progress made under each activity, however, the members gave certain suggestions to be implemented by respective Principal Investigators. The Chairman and other Members finalized recommendations for the year 2002-2003. The meeting ended with a vote of thanks proposed by the member Secretary, Dr. Madan Mohan.



### Fisheries Scientific Panel & Project Screening Committee

Dr. Vass, Director attended this meeting at Subject Matter Division, KAB-II, ICAR, New Delhi between November 26 to 28, 2002. The meeting was held under the Chairmanship of DDG (Fy)

### Joint Staff Council

The Institute's Joint Staff Council's meetings were held in

July 2002 and November 2002 under the Chairmanship of the Director and was attended by various members from official and staff side. In the meeting action taken on previous agenda items were reviewed and new agenda items regarding welfare of the staff were discussed.

### Rajbhasha Committee

The regular quarterly meetings of the Hindi cell of the Institute were held in September 2002 and December 2002 under the Chairmanship of the Director. In the meetings it was decided to celebrate the current year as *Hindi chetana mass* in order to bring awareness among the staff members about our national language.

### Peer Review Team

The achievements under the project "Aquaculture management in coldwaters-Evaluation of mahseer fishery potential and its farming feasibility for conservation in Himalayan region" being executed under NATP was reviewed by Peer Review Team, comprising Dr. R.M. Acharya, Chairman; Dr. Tyagi, Member Secretary and Drs. Sharma and V.N. Sharda, Members at G.B. Pant University of Agriculture and Technology, Pantnagar on



November 29, 2002. Dr. C. B. Joshi, Principal Scientist and Principal Investigator of the project briefed the committee members about the progress of work made under the project by the lead centre and the collaborating centres for the period between March, 1999 to February, 2002. The Chairman and the members of the committee were satisfied with the progress of work under the project and suggested guidelines to accomplish the remaining activities.

## HUMAN RESOURCE DEVELOPMENT

### Participation in Workshops/Seminars/Symposia/Meetings/ Brain Storming Sessions, etc.

- Drs. K.K. Vass, Director; M. Mohan, H.S. Raina, C.B. Joshi, Shyam Sunder, and B.C. Tyagi, Principal Scientists; A. K. Singh, Senior Scientist; Yasmeen Basade and K. D. Joshi, Scientists (Senior Scale) and R. Kapila and Sh. A. K. Nayak, Scientists and Sh. A. U. Khan and Sh. P. Sanga, SRF's participated and presented their research papers in the National Seminar on Aquatic Resource Management in Hills organized by NRCCWF, Bhimtal during October 4-5, 2002.
- Dr. B.C. Tyagi, Principal Scientist, participated in the seminar at Bhopal organized by Indian Society of Fisheries Professionals during October 26-28, 2002.
- The institute displayed an attractive stall at Lohagat on the occasion of "KISAN MELA" on October 30, 2002 organized by G.B. Pant Agricultural University. The mela was inaugurated by Dr.P.L. Gautam, Vice-chancellor of the University. Many dignitaries including D.M. Champawat Shri Tarkendra Vaishnav visited NRCCWF stall.
- Dr. K.K. Vass participated in the Symposium "Moving towards the sustainable agricultural development in Uttaranchal" organized by GB Pant University on November 12-13, 2002. A special lecture was delivered by Dr. S. Ayyappan, DDG(Fy) ICAR on November 12, at the College of Fisheries, this special session was chaired by Dr.S.N. Dwivedi. On this occasion a poster exhibition was organized by NRCCWF at the Fisheries College which was also attended by Dr.B.C.Tyagi, Principal Scientist and Shri A.K. Nayak, Scientist of NRCCWF. At the concluding session on November 13, Dr.P.L.Gautam, Vice-Chancellor presented a memento to Dr. Vass on behalf of the University.

- Dr. R. Kapila, Scientist, participated in the seminar organized by Society of Biological Sciences at PAU. Ludhiana 14-16 November, 2002 and presented a research paper.
- Dr. R. Kapila, Scientist attended a special meeting on "Fish Genetics and Biotechnology" convened by the DDG (Fy) at KAB-II on December 3, 2002. At the meeting he apprised about the area of work in this field that can be beneficial to cold water fishery and initiated at NRCCWF.
- Dr. K.K. Vass attended a workshop on "Mountain Environment and Development: Potential and Prospects" on December 9-10, 2002. It was organized by the GB Pant Institute of Himalayan Environment, Kosi, Almora. Dr. Vass delivered a special invited lecture on December 9<sup>th</sup> on the theme area of Aquatic Resource Management in Mountains. He Chaired one technical session and participated in the plenary session for formulation of recommendations.



- Drs. K.K. Vass, Director; M. Mohan and B.C. Tyagi,

Principal Scientists participated and presented their research papers in the Sixth Indian Fisheries Forum held at Central Institute of Fisheries Education (Deemed University), ICAR, Mumbai during December 17-20,2002.

- The NRCCWF participated in a national level exhibition “organized on the occasion of Sixth Indian Fisheries Forum between December 17-20, 2002 at CIFE Mumbai. The NRCCWF stall was visited by many dignitaries and the prominent among them being Dr.Panjab Singh, Secretary DARE & DG, ICAR; Dr.S.Z. Qasim, former Member, Planning Commission, Govt. of India; Dr. S.A.H.Abidi, Member, ASRB; Dr.Pedro Bruneo, Co-ordinator, NACA, Thailand, Bangkok; and Dr.P.V.Dehadrai, former DDG (Fy) ICAR.



- The institute participated in the national celebration of “KISAN SAMMAN DIVAS ”at IARI Campus, New Delhi between December 21-23,2002. The activities of the institute were displayed through posters and live material of coldwater fish species was also exhibited. The stall was visited by Shri Hukumdeo Narayan Yadav Ji, the Hon’ble MOS, for Agriculture, Govt. of India. Dr. B.C. Tyagi and Dr.Rajiv Kapila explained the activities of the centre to different visitors.
- Continuing our activities with regard to “KISAN SAMMAN

DIVAS” the centre participated at District level programme on December 23, 2002 at Champawat. The display material was exhibited at Ban Panchayat Bhawan. Our Scientist Dr.K.D.Joshi interacted with various farmers and District authorities on the fishery potential of the region. More than 120 farmers including 60 women farmers visited our stall.

- Dr. A.K. Singh, Senior Scientist, participated in the 22<sup>nd</sup> Annual meeting of the Academy of Environmental Biology and the National Symposium on Biodiversity and Resource Management jointly organized by the Academy of Environmental Biology and National Bureau of Fish Genetic Resources, Lucknow during September 11-13 2002 and presented the paper “Environmental Stress and adaptability in coldwater fishes with special reference to pineal gland”.
- Dr. A.K. Singh, Senior Scientist participated in the 72<sup>nd</sup> Annual Session of the National Academy of Sciences India and the National Symposium, on Biodiversity: A Scientific approach agenda for 21<sup>st</sup> century at North-East Hill University, Shillong during October 25-27 2002 and presented the paper entitled “Impact evaluation of exotic fish culture and biodiversity conservation in northeast for sustainable production”.

### Training

- Shri A.K. Nayak, Scientist; and Shri. Pratap Singh, Junior Clerk participated in the NATP organized programme on “Computerised Financial Management Systems (FMS) between August 1-2,2002 at CSWCRT&I, Dehradun
- Dr. K.D.Joshi, Scientist successfully completed the summer school on “Methods of Assessment of Aquatic ecosystem for fish health care ”organized by CICFRI, Barrackpore from July 18 to August 16,2002.
- Shri Baldev Singh, Technician was deputed to attend a programme on “Library Automation and Resource Sharing” between July 15-19, 2002. It was organized by Indian National Scientific Documentation Centre, New Delhi.

## STAFF NEWS

### Sports meet

A twelve member team of NRCCWF under the leadership of Dr.A.K.Singh, Senior Scientist, participated in Zone IV, Inter-Institutional Sports Meet held at National Dairy Research Institute, Karnal, Haryana between December 2-5, 2002. The team participated in number of events.

### Wedding bells

Shri. Santosh Kumar Arya, T-3, our colleague got married on December 6, 2002. The NRCCWF family wishes the couple a happy wedded life.

### Promotions/Assessments/Career Advancement

Following Scientists of NRCCWF received promotion under Career Advancement Scheme of ICAR:

Dr. Yasmeen Basade	Scientist (Senior Scale)	w.e.f. February 20,2001
Dr. K.D. Joshi	Scientist (Senior Scale)	w.e.f. July 1, 2000

### Award/Honors

- Sri Rajeev Kapila Scientist has been awarded Ph. D. degree on the topic “Molecular Genetic Characterization of Coldwater Fish-*Schizotherax richardsoni* (Gray) with protein (s) and DNA based Markers” from G.B. Pant University of Agriculture & Technology Pantnager in August 2002.
- Dr. K.K. Vass, Director, received Norman Dill Memorial Gold Medal Award of Society of Biosciences, Muzaffarnagar for his contribution to Inland Fisheries Research and Development



in the country on October 4, 2002 from the Hon'ble Minister of Fisheries, Govt. of Uttaranchal Shri Naithani Ji.

The Institute NRCCWF (ICAR), Bhimtal was awarded the best performance award by the Society of Biosciences for most successfully organizing the National Seminar on Aquatic Resource Management in Hills during October 4-5, 2002, at Nainital.

Dr.C.B. Joshi, Principal Scientist was nominated as Judge at the District Inter College Science Competition held at Lilawati Pant Inter College Bhimtal on October 28, 2002.

Dr. K.D. Joshi, Scientist headed the panel of judges at the District level to screen the projects/models on the occasion of "BAL VIGYAN CONGRESS" organized by the District authorities on November 11, 2002.



## FROM DIRECTOR'S DESK

Dear Reader,

The Year 2002 has come to close and we wish our readers and fishery fraternity a very Happy New Year. We have received continued support from all of you for the NRCCWF—NEWS from time to time. The institute during the year has many achievements to its credit but still many challenges lie ahead of us for which all the members of staff have to put in hard work. We are already in the Xth plan and our work has been given a new focus in line with plan requirements, through our continued discussions at the institute and at SMD level in the Council. The year 2002 incidentally was International Year of Mountains. It has special importance for us because NRCCWF is located in a mountain State and we are mandated to work for hill fisheries development. The importance of the world's mountain regions was internationally recognized since the Earth Summit in Rio de Janeiro in 1992; Agenda 21 contains a chapter specifically devoted to mountains. India has a major stake in mountain development because of Mighty Himalayas. The sound management of natural resources viz., land and water in our mountain States through traditional and modern technological tools is the key to their sustainable growth. Many events were celebrated all over the world during the year to deliberate and focus on various mountain related issues. The first major seminar series were organized in New York during February 2002 and followed by Bishkek Global Mountain Summit between October 28 to November 1, 2002 and the Wrap-up event for the year was organized during December 2002 in New York. In the intervening period many major events were organized in Europe, Africa, Asia, in the countries involved in mountain development and their sustainability. In India many events were organized and the State of Uttaranchal, had many activities focused on Mountains during the year. The Watershed Management Directorate, Uttaranchal, Dehradun and Centre for Development Studies Academy of Administration, Uttaranchal, (Nainital) organized a National Workshop on "Sustainable Mountain Agriculture" between September 27-29<sup>th</sup> 2002 which was inaugurated by Shri Surjit Singh Barnala Ji the Hon'ble Governor of Uttaranchal. His Excellency mentioned in his remarks the importance of fish in mountain development. In this workshop mountain agriculture and related issues were discussed. Under watershed management in hills the need for inclusion of fishery component was stressed by Dr. Vass in the workshop. The NRCCWF on its part made a humble contribution by organizing a National level seminar at Bhimtal (Nainital) between October 4-5, 2002 in which entire fishery development and aquatic resource management in mountains was discussed followed by action oriented recommendations. This was followed by National Workshop on "Mountain Environment and Development—Potential and Prospects" held between December 9-10, 2002 at Kosi-Katarmal, Almora, organized by the G.B. Pant Institute of Himalayan Environment & Development. Due to flagging the issue of fishery by NRCCWF at the workshop it was included in the recommendations. All these national level activities in the State of Uttaranchal, did create awareness among the local/national level stake holders/policy makers/planners/researchers/extension workers/ NGOs, about the issues/problems/demands of mountain people. It may be emphasized that Mountain regions require urgent attention to achieve sustainable development based on traditional practices and modern knowledge based technology specific to each mountain altitude. This approach is necessary to protect its fragile ecology, biodiversity and to provide sustained natural resource support to the plains of India. This requires an investment in human resource development, trainings, technology generation through up-scaling of research support, wherever required infrastructure creation, for which Planning Commission Govt. of India should provide special financial support.

K.K. Vass

Compiled and edited by : Dr. K.K. Vass, Dr. C.B. Joshi and Dr. Yasmeen Basade  
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