

2003 ACTIVITY REPORT of Central Fisheries Research Institute

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Since its establishment, Central Fisheries Research Institute (CFRI) has been active in many scientific researches including data collection in national base and evaluation in marine and inland waters. Black Sea, Marmara and Northeast Anatolia Regions are the activity fields of the institute.

Through the activities, both original scientific studies are performed as well as information is distributed to private sector, in other words, given opportunity to put aquaculture technology into practice. As a result, improve the quality of life in regional and national levels. Trabzon Fisheries Research Institute was established under structure of Ministry of Agriculture and Rural Affairs (MARA), General Directorate of Agricultural Research (GDAR), in 1987. In 1998, the institute got "Central Institute" status by the Ministry and its regional base duties advanced to national level.

Institute's research studies are conducted by nine divisions in coordination of the Director and two Deputy Directors technically and administratively. Research Committee constituted by technical staff of the institute performs planning and evaluation of the research activities.

Program Evaluation Meeting was held in May 2003 and final reports of three projects were presented under the context of this meeting.

In the circumstance of the Project "Participation of Turbot Juveniles that are Produced by the Way of Culture, to the Natural Stocks and Observation of Their Bio-ecological Properties" final releasing activities were completed in 2002 and 20 thousand tagged fish were released to the sea. Recapture of fish and introductory studies for fishermen are on going. To specify the feeding scheme of turbot, studies including identification of the regional benthic organisms, were conducted seasonally.

In the scope of "State of Shrimp Fishery (*Parapenaeus longirostris*) in the Marmara sea,

Effectiveness of the catch materials and sustainable usage of shrimp stocks" project, laboratory studies were carried out on biology of reproduction. Preparation of final report was initiated.

In the circumstance of "Environmental Measurement and Observation Program of Çayeli and Büyükdere (Search Program of Heavy Metals Sea Water)" conducted by institute as a result of a protocol signed with Çayeli Copper Mine Company, 36, 37, 38 and 39 periodical sampling studies were done in Jan. April, July and Oct. respectively. Collected water samples were enriched with extraction method in laboratory after that Mn, Fe, Zn, Cd, Pb, As, Hg, and Cu analyses were performed by AAS (Atomic Absorption Spectrometer). Analysis results were reported and submitted to the related foundations.

In accordance with the project entitled as "Investigation of Seasonal Change of Some Physical and Chemical Parameters in the Sea Water Column on the Trabzon Coast", from the started date – Jan. 2001- onwards, CTD measurements have been conducted at four identified stations, that is 50m, 100m, 150m and 200m depths off institute. CTD includes temperature, salinity, sigma-t, electrical conductivity, light transparency, dissolved O₂, pH and chlorophyll-a. This application was created once a 15 days in winter season and weekly in summer and spring seasons. Obtained data were evaluated in a report at the end of 2003.

Considering the needs of institute particularly the project of Genetics and Breeding division, construction of a genetic laboratory has been given start. The function of this laboratory will be overcome the shortages of the researches in particularly the alternative specieses of aquaculture. This laboratory is expected to be activated in 2004.

At the Evaluation Meeting of the collaborative project between MARA and JICA "The Fish Culture Development Project in the Black Sea", it was decided to extend the project

period 2 years and two new experts were dispatched for the follow-up project. More than 720.000 larvae were produced in the production season of 2003. By September, one part of fish was separated for examination in hatchery, whereas another part, namely 70 thousands were transferred to some companies in private sector. Technical staff of these companies had been given practical training in institute during production season. One of the important extension activity was conducted in Bodrum by means of a seminar.

Final Report of "Observation of Growing Properties (in Cages and Ponds) of Turbot in the Black Sea Region" was completed and submitted in the Program Evaluation Meeting held in institute in May 2003. On the other hand, in September, Aegean region's aquaculturists were given knowledge about the results of the project at the training meeting in Bodrum. In 2004, it is planning to arrange an another training program including rearing terms as well.

Launched in 2001, another project is presently in progress. The aim of this project is to observe the culture characteristics of Black Sea Trout (*Salmo trutta labrax*) which is one of the most important commercial species in Black Sea region. "Culture of Black Sea Trout (*Salmo trutta labrax*) and Its Use for Releasing" Through the first stage of the project, fish were collected from nature and stocked and fed in culture medium up till the spawning season and artificial spawning procured in 1999, 2000 and 2001. To obtain mature fish, feeding and growing studies of seed products are being carried on. Produced in hatchery conditions, larva of 1999 were used as brood-stock in 2003. Experimental studies are being continuing to evaluate the possibility of mass culture production. The project will be continued up till 2005. Following the finalization of the project, it will be evaluated the opportunity of both enhancement of natural stocks and culture form of Black Sea trout which is an economically valuable, anadromic species of Black Sea Region.

In the circumstance of "Reproduction Possibilities of Sturgeon in the Black Sea Region" Project, formation of brood-stock and their feeding and growing studies were performed. Under the light of meetings held with related groups from universities and a technical trip organized to Ukraine focused on visiting the hatcheries, shortages were determined in infrastructural base and the necessity of a new extensive facility for

sturgeon culture was concluded.

From 2001 onwards, Fish Diseases Laboratory have been active to serve the research needs. Diagnoses and medical treatment of diseases caused by bacteria, parasites and fungi are made. Similarly, needed materials and equipment are ready for applications of viral diseases, relevant services will be given in near future. Coming from several farms, fish were diagnosed and medically treated in this lab in 2003.

Institute dispatched participants to the meetings organized by TÜBİTAK and General Directorate of Agricultural Researches of MARA. By these meetings, projects, involved in United Nations 5. and 6. Programs, were observed and co-operation possibilities, that can enable institute foreign sources, were investigated.

Technical personnel of institute have been trained by means of periodical seminars. Totally 18 seminars were realized with the support of Karadeniz Technical University in the scope of MARA's in-service training program.

The official refereed journal "Turkish Journal of Fisheries and Aquatic Sciences" have been published biannually and distributed widely. Design, cover page concept and technical preparations are made by institute and edited by editorial group consisting of academicians from different countries such as Japan, Russia, Ukraine, Azerbaijan, Bulgaria, Romania and Turkey, the scientific periodical consists of scientific articles from Turkey and abroad as well.

A new web page (www.sumea.gov.tr) has been designed and activated by institute technical staff. On the other hand the library has been served to research and scanning terms not only for institute personnel but also other researchers.

In order to monitoring the studies, photo and video takings have been performed and transferred into computer medium.

To determine the water potential for organic production, field surveys were conducted through the region cover Ordu, Giresun, Gümüşhane, Rize, Artvin and Trabzon provinces.

In response to their applications, fish farmer have been given technical information and consulting services by collaborative effort of Aquaculture and Aquaculture Health divisions.

