The Indian Council of Agricultural Research (ICAR) sponsored Short Term Training Programme on “Development and Characterization of Fish Cell Lines for Biotechnological Applications” was organized at ICAR-Central Institute of Fisheries Education (CIFE), Mumbai from February 1 to 10, 2018. The training was designed to introduce the participants to basic and advanced technologies available in the area of fish cell culture. The training programme was inaugurated by Dr. Gopal Krishna, Director, ICAR-CIFE, Mumbai on February 1, 2018. The training programme was organized by Dr. Aparna Chaudhari, Course Director and Dr. Mukunda Goswami and Dr. Gayatri Tripathi, Course Coordinators. A total of eleven participants including nine men and two women from five Colleges of Fisheries and three ICAR institutes attended the training programme. An intensive training schedule was followed with blended learning of theoretical lectures and hands-on- practical exposure with the help of internal as well as external experts available in and around Mumbai. The lectures covered basic good laboratory practices, techniques for development of cell lines, detection of contaminants, characterization of cell line using cytogenetic and molecular markers, applications of cell lines in biotechnology, cryopreservation of cell line etc. In addition, visits to CIFE’s fishing vessel and IIT Bombay were made to expose trainees to available facilities. A training manual was prepared covering all the theoretical and practical lectures covered during the training. The pre and post evaluation of trainees revealed 65 % improvement in their knowledge related to the subject. The overall rating of the training was excellent based on the feedback of trainees. Dr. Gopal Krishna, Director, ICAR-CIFE, Mumbai presided over the valedictory function of the training programme and he urged the trainees to participate in future collaborative research programmes of ICAR-CIFE, Mumbai. The participants expressed high level of satisfaction and appreciated the efforts of Course Director and Coordinators for organizing such a useful training programme in a frontier area of fisheries science. The participants expressed their interest in strengthening linkages for academic and research excellence in the country.