

**Report on “Farmers’ Training Programme (Virtual)” on Scientific Aquaculture Practices
Held on 12th July to 14th July, 2021 at West Bengal University of Animal and Fishery
Sciences, Belgachhia, West Bengal**

- **Proceedings of the Event:**

- 1) **Name of the Biotech KISAN Hub and its collaborating Institutes**

DBT Mission Mode Programme Entitled “Establishment of Biotech-KISAN Hub” at West Bengal University of Animal & Fishery Sciences at Aspirational districts of WEST BENGAL

- 2) **Title of the event:**

“Farmers’ Training Programme (Virtual)” on Scientific Aquaculture Practices

- 3) **Date:** 12th July to 14th July, 2021

- 4) **Venue:** West Bengal University of Animal and Fishery Sciences, Belgachhia, West Bengal (Virtual Mode).

- **Total Meeting link :** Google Meet App link: <http://meet.google.com/iex-pkwe-rvq>
Live steaming in YouTube with following link:
https://www.youtube.com/channel/UChQKD16EQtTsPhem118kBIA?view_as=subscriber
- **Number of Participants:**
156 nos. of fish farmers (male-60, female-96) of West Bengal participated in the training programme. From five aspirational districts (Nadia, Murshidabad, Birbhum, Maldah and South Dinajpur) **98** farmers participated in the training programme.
- **Invited Guests:**
 - 1) Prof. Chanchal Guha, Hon’ble Vice-Chancellor, WBUAFS.
 - 2) Prof. B.K. Das, DREF, & Dean (Actg.), Faculty of Fishery Sciences, WBUAFS.
- **Invited Experts:**
 - 1) Dr. Satabdi Das, Scientist (Selection Grade), WBUAFS
 - 2) Dr. Biswajit Goswami, SMS (Fishery), DDKVK, Majhian, UBKV
 - 3) Mr. Sutanu Karmakar, Assistant Professor, WBUAFS
 - 4) Dr. Surya Kanta Sahu, Assistant Professor, WBUAFS
 - 5) Mr. Asim Kumar Giri, Young Professional-II, Biotech KISAN Hub, WBUAFS
 - 6) Dr. Swaranadhuti Nath, Assistant Professor, WBUAFS
 - 7) Dr. Srinibas Das, Assistant Professor, WBUAFS
 - 8) Dr. Indranil Ghosh, SMS (Fishery Sciences), Jalpaiguri KVK, WBUAFS
 - 9) Dr. Paramita Dasgupta(Das), Young Professional-II, Bt KISAN Hub, WBUAFS
 - 10) Mr. Anindya Nayak, SMS (Fishery), KVK, Asokenagar, WBUAFS

- **Brief about the programme:**

Fish protects our daily nutritional balance. Fish is an easy-to-digest food with protein, vitamins and minerals that are vital for our health. Fish is a must in the daily diet of Bengalis. About 80% of the people in India eat fish. The role of fish farming in agriculture in our country is immense. Fish farming is not just for our food. This results in economic development of our state and country which is about 1 percent of the gross national

product. Fish farming is a way to make more profit at low cost. It is not difficult to market the fish produced to meet the demand. There are also huge employment opportunities in fish farming. It is important to increase fish production for the multifaceted needs of fish. In order to increase fish production, it is necessary to be proactive in reforming without filling the fallen water bodies. Good quality fingerlings or yearlings should be stored. People should be encouraged to cultivate integrated and mixed fish. Must receive proper training. The government should be proactive in setting up fish cooperatives and provide easy loans to fish farmers. Eco-friendly fish farming should be done in an advanced and scientific manner.

Make the most talked about word in the world right now. After the Second World War, the Coronation Extreme has emerged as a terrible crisis of human civilization. In this situation, people from different parts of the state are facing various problems. Many people from the villages used to go and live in different states for employment. Those people are unemployed today because of coronary heart disease. This coronary parasitism has affected agriculture, animal husbandry as well as fish farming. Therefore, for the purpose of environment friendly fisheries, overall development of fisheries and employment, DBT, Govt. of India funded Mission Mode programme, Biotech Kisan Hub under West Bengal University of Animal and Fisheries Sciences for all fishermen in West Bengal, especially for 5 potential districts of West Bengal (Birbhum, Nadia, Murshidabad, Malda and South Dinajpur). Through this, a 3-day "Fisheries in a Scientific Method" training was organized. This was held from 12th July to 14th July 2021. As a part of the 75 Years of India's Independence- Azadi Ka Amrit Mahotsav, the role of the farmers to adopt the latest innovations and technologies at their farms to increase the net production of all agricultural crops is an important phenomenon for celebration of Indian independence towards **Atma Nirvor Bharat**. The farmers training will cater to the need of skill upgradation and enhancement of knowledge on Scientific Aquaculture Practices and thus it will help in enhanced production and livelihood security. As a result the generation of higher income from fish farming will be an important tool for nation building through their improved livelihood by the agricultural sector. The main problems faced by our state are not the lack of proper technology but its integration into the Scientific Aquaculture Practices of the farmers in order to convert production accomplishment. Aquaculture has now reached a stage where transfer of appropriate technology for small and marginal farmers and upcoming entrepreneurs has become extremely important. Thus, skill up gradation of them is the need of the hour in order to enhance the productivity of aquaculture for doubling the income of farmer through effective capacity building with suitable curriculum. Capacity building and continuous education programmes are integral part of the project. To mitigate the problem farmers' training programme of fish farmers of West Bengal especially from aspirational districts will be made to give an scientific idea about overall aquaculture management, especially nursery and rearing pond management, polyculture, air breathing fish culture, integrated fish farming, importance of water and soil parameters, value addition of fish products, feed and feeding management, ornamental fish culture and trade, freshwater fish diseases and species diversification through the expert faculty members of the University. Such training programme will increases knowledge and skills for doing aquaculture practices and thus it bridges the gap between needs and skills, knowledge

and behaviour. **156** nos. of fish farmers (male-60, female-96) of West Bengal participated in the training programme. From five aspirational districts (Nadia, Murshidabad, Birbhum, Maldah and South Dinajpur) **134** farmers participated in the training programme.

- **Quotes of Guests attending the event:**

At the beginning of the training programme, Dr. K.C. Dhara principal Investigator cum Hub Facilitator of the project welcomed all dignitaries in the virtual mode particularly the farmers' of West Bengal who are in distressed condition due to COVID 19 pandemic situation. In his address in the inaugural session, Prof. B. K. Das, DREF, WBUAFS told that the Scientific Aquaculture Practices is the need of the hour among the fish farmers. He praised for the attempt in developing successful entrepreneurship through enhanced aquaculture practices for enrichment their livelihood which in turn helps in nation building. The Vice-Chancellor of the University Prof Chanchal Guha formally inaugurated the training programme assured that the University is duty bound to create livelihood generation of the farmers particularly the farm women of the remote part of West Bengal. He also urged that, this training program will create impact on knowledge up gradation on Scientific Aquaculture Practices among the farming community through qualified resource person of this field for benefit of the distressed farming community who have faced a serious problem due to COVID 19 pandemic situation. He also said that, during commemoration of the 75 years of Independence of India a series of activities taken by Biotech KISAN Hub team will certainly boost up the farmers.

- **Quotes of speakers and experts attending the event:**

As per the course curriculum formulated by the experts and local need of the fish farmers the renowned experts of the University and KVKs delivered their lecture, namely accordingly Dr. Satabdi Das (Scientist, Selection Grade, DREF, WBUAFS), described about Nursery and Rearing Pond Management, Dr. Biswajit Goswami (SMS, Fishery, DDKVK, Majhian, UBKV), described about Polyculture of Fish which is considered to be the need of fish farmers. Mr. Sutanu Karmakar (Assistant Professor, Dept. Of Aquatic Environment Management, WBUAFS), described about Air Breathing Fish Culture which create maximization of profit generation. Dr. Surya Kanta Sahu (Assistant Professor, Department of Aquaculture, WBUAFS), delivered the importance of about Integrated Fish Farming among the farmers. Mr. Asim Kumar Giri (Young Professional-II, Biotech KISAN Hub, WBUAFS) made acquainted the farmers about the Importance of Water and Soil Parameters in Fish Culture. Need of fish processing and Value Addition of Fish Products for effective entrepreneurship has been described by Dr. Swaranadhuti Nath (Assistant Professor, Dept. of Fish Processing Technology, WBUAFS). Dr. Srinibas Das (Asst Professor, Deptt. of Fish Nutrition, WBUAFS has trained about Feed and Feeding Management in Fish Culture. Ornamental Fish Culture and Trade are considered to be profit making business among the rural youth as stated by Dr. Indranil Ghosh (SMS,

Fishery Sciences, Jalpaiguri KVK, WBUAFS). Dr. Paramita Dasgupta (Das) (Young Professional-II, Biotech KISAN Hub, WBUAFS) described about Freshwater Fish Diseases and their management. Species diversification in Aquaculture was taught by Mr. Anindya Nayak (SMS, Fishery Sciences, KVK, Asokenagar, WBUAFS), All of them discussed various relevant topics and tried to address the problems of the trainees during this training programme.

- **Quotes of beneficiaries attending the event:**

At the end of the training program, the farmers expressed their satisfaction and submitted a feedback form about their 3-day training program experience. Participated in the training programme, Md Mosibur Rahaman a migrant labour from Dantura, Paikar, Murarai(II), Birbhum expressed his need of training on Scientific Aquaculture Practices to cope up his livelihood through fish farming. Indrajit Dey, Amit Bera, Akashdeep Sen, Malati Das, Rupali Mishra and Miajan Ali were some of the trainees who expressed their happiness over the course curriculum which would be helpful for fish farming and livelihood enhancement. They also told that they are thankful to Biotech KISAN Hub, WBUAFS for extending such facilities at the time of need.

