**Report** 

Name of the Course	:	"Operation of FRP Carp Hatchery"
Date	:	08 <sup>th</sup> July to 10 <sup>th</sup> July, 2013.
Number of trainees attended	:	12 Nos.
Day 1:		

Date: 08.07.2013

#### Inauguration:

It was facilitated and chaired by the Fishery Officer Smti. M. Khongjliw. The program began with an opening remark from the Research Officer, Smti. P. Phawa, welcoming all the trainees to the institute. She encouraged them to take this golden opportunity and congratulated them on being the only trainees to be trained on the working principle of Fibreglass Reinforced Plastic Carp Hatchery for producing quality fish seeds. This was followed by a personal introduction by all the trainees. She then spoke about the objectives of the mission and address them of all the guidelines associated with the establishment of portable Fibreglass Reinforced Plastic Carp hatchery in the private sector. The program ended with a vote of thanks from E Lyngdoh, Programme Manager.

#### 1<sup>st</sup> session:

#### Topic: "Introduction to the Principles and components of FRP Carp Hatcheries (theory)".

#### Lecturer: Shri P. Lamin, Research Assistant

CIFA has designed and developed FRP Carp hatchery which can be transported from place to place for timely production of quality seeds. The innovation of portable FRP Carp hatchery has added a feather to the blue revolution in the country by producing fish seed at the farmers' field. The unit consists of four majors' parts, i.e., breeding-cum-spawning pool, hatching-cum- incubation pool, eggcum-spawn collection chamber and overhead water storage tank. The system is so designed that it creates the environment suitable for fish breeding in the field conditions for 10-12 kg of carps in one operation. In one run, 1.0-1.2 million spawn can be produced.

#### 2<sup>nd</sup> session:

#### Topic: "Practical on induced breeding of *Labeo gonius in* FRP Carp Hatchery".

Male brooders and female brooders of *L.gonius* were netted from the ponds and the trainees were shown how to identify between a male and female brooders followed by demonstration on induced breeding ,how and in which area the fish is to be injected. After practicing with a dead fish the trainees were then allowed and given a free hand to practice the skill of injection on live and gravied brooder. They were also shown at the same time on how to operate the FRP carp hatchery.

Induced breeding started at 2.00 p.m. till 4.00 p.m. and the fish started releasing eggs at around 10.00 p.m. and about 20 ltrs of eggs estimating about 5 lakhs eggs were collected and transferred to the hatching pool for further development.

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Day 2 :	
Date :	09.07.2013.
1 <sup>st</sup> session	:
Торіс	: "Good Management Practices for aqua hatchery inclusive of broodstock
	Development & Management of Nurseries and rearing ponds".
Lecturer	: Smti. D.G. Lyngdoh, R.D.O.

Water quality management is one of the most important parameters for success of a fish farm. A well managed farm having good aquatic environment ensures high rate of survival and growth of fishes. In a farm, fishes are forced to live in a relatively smaller body in large numbers, any adverse water quality condition will quickly and significantly irritate and stress the fishes. Thus growth rate of fishes reduces and fishes become vulnerable to disease. In adverse situation, poor water quality may even become detrimental to them.

# Topic : "Introduction of breeding techniques: wild, controlled, bundh, happa, and induced breeding (Theory).

Lecturer : Smti. D.G. Lyngdoh, R.D.O.

Aquaculture has come a long way with the success achieved in long years of research associated with induced breeding of fishes through administration of pituitary hormones under controlled conditions and the gradual development of this technique has paved the way and thereafter, adequate quantity of pure seed of these carps is available for large scale culture purpose. The trainees were familiarize on how it all started from hapa breeding to cemented eco-hatchery.

#### 2<sup>nd</sup> Session

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#### Topic : "Introduction to Indian Major Carps & Exotic Carps and their breeding habits-Theory".

Lecturer : Smti. M. Khongjliw, Fishery Officer.

The major carps of India which are also referred to as Gangetic Carps are the most important among the commercial fish species and form the major component of the aquaculture system in the country. Since the last two and a half decades there was a steady progress in carp farming in India due to the availability of seed. Both IMC and exotic are also potential candidate for Meghalaya and are usually cultured and they attain maturity but do not breed in confine waters. The session gives a brief idea on how to raise the fish in confined waters and their breeding biology so as when time comes they can be readily bred through induced breeding.

#### Topic: Practical on Water Quality analysis for Fish culture.

Lecturer: Smti. M.A. Khongjliw, Fishery Officer, Shri P. Lamin, Research Assistant.

One of the most important Parameters for success of a fish Farm. A well managed farm having good aquatic environment ensures high rate of survival and growth of fishes. All Management practices depend on the Initial Water Quality of the Pond i.e. pH, Plankton Productivity, Temperature and Dissolve oxygen. The Farmers were given a practical demonstration on Water Quality Analysis and were allowed to carry out the activity themselves.

#### Day 3:

#### Date: 10.07.13

#### Topic: "Seed production of IMC, Exotic Carp and minor carps".

Lecturer: Shri P. Lamin, Research Assistant,

Seed is a critical input in any aquaculture activity. With the fast growth of aquaculture in the country demand for seed is increasing day by day. In a state like Meghalaya there a various disadvantageous because of the terrain, unavailability of carp seed is still a limiting factor and in order to develop aquaculture a sustained timely supply of fish seed is the prerequisite. Therefore to meet this demand establishment of portable FRP carp hatchery can play an important role for production of quality seeds.

#### Afternoon Session:

#### **Valedictory Function:**

The program was chaired by Smti. M.A. Khongjliw, Fishery Officer and the Guest for the Occasion was, the Research Officer, Smti. P. Phawa.

The certificates were distributed to the trainees for their successful completion of the training course.

#### Conclusion:

A total of 12 nos. of trainees attended from various district. The trainees expressed their happiness in seeing and doing for the first time the breeding of fishes and also seeing the development of the eggs into a spawn after 24 hrs only and now they are confident that they can actually do it on their own and it is not at all complicated as it seem.

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# List of Participants for Training on the "Operation of FRP Carp Hatchery" for the Beneficiaries of Meghalaya w.e.f. 08.07.13 to 10.07.2013

## State: Meghalaya

## Total no. of participants: 12 nos.

SI. No.	Name	Address	C & RD Block	District
1.	Shri Gilbert N.Marak	Songsak Agitokre	Songsak	East Garo Hills
2.	Shri Mathias Ch.Momin	Resubelpara	Resubelpara	North Garo Hills
3.	Shri Suresh M.Sangma	Chisim Akawang	Resubelpara	North Garo Hills
4.	Shri Pyrkhatjngai Syngkli	Mawkangi	Umling	Ri-Bhoi
5.	Smti. Bulbuline R.Marak	Nawalgre	Selsella	West Garo Hills
6.	Smti. Arlin Suting	Siatbakon	Pynursla	East Khasi Hills
7.	Shri Kyrshan Syiemiong	Mawkyrwat	Mawkyrwat	South West Khasi Hills
8.	Smti. Ability Wanshong	Thyllaw	Mawsynram	East Khasi Hills
9.	Shri Shyllong Pohtam	Kudengrim	Amlarem	West Jaintia Hills
10.	Shri Lam Singh Tynsong	Lahalien	Khliehriat	East Jaintia Hills
11.	Shri Wosting Suting	Amtapoh	Amlarem	West Jaintia Hills
12.	Shri Langbok Thangkhiew	Syadrit	Umsning	Ri-Bhoi

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