

Brief report on Sustainable Aquaculture Training

Sundarban Climate Adaptation
Implemented by DRCSC
Supported by Sign of Hope (SoH) & BMZ

Venue: Ramganga Project Office

Date: 28/6/18 - 30/6/18

Introduction: DRCSC is implementing a project titled “**Sundarban Climate Adaptation**” with support from Sign of Hope (SoH) and BMZ, Germany in 8 villages of Ramganga Gram Panchayat, Patharpratima Block, South 24 Pgs District of West Bengal. The overall objective of this project is to regenerate and protect the endangered flora and fauna of the Sundarbans in a sustainable manner and focus on reforestation and empowerment of the local population with regard to resource management and positive management strategies, thus contributing to the improved resilience of the target group in the face of natural disasters. Within the course of implementation of the activities and based on the primary information from participatory exercises, it was felt necessary to give training and motivation regarding long term and sustainable aquaculture with indigenous species. This agro-allied activity will ensure year round/seasonal availability of aquatic fauna considering optimal use of pond based ecological resources thus giving confidence to the community for adapting to climatic changes and giving a better future. In this regard a **one day training programme on sustainable aquaculture** was organized at **Ramganga project office** where nearly **157 group members** participated covering all the **groups in 8 villages**.

Objective of the programme: The purpose of this training programme is to orient and build capacities on sustainable/long term aquaculture which ensure year round/seasonal availability of aquatic fauna, supply of nutritious food and additional income considering optimal use of pond based ecological resources thus lead to develop self sufficiency and overall improvement of the area.



Agenda of training:

- ❖ Preparation and maintenance of Pond
- ❖ Mixed fish cultivation
- ❖ Balanced diet for fish
- ❖ Diseases of fish

Discussion:

After introducing with all the participants, sharing of objectives has been done. The purpose is well explained by the resource person among the group members present. In the vulnerable, hazard prone and saline prone region there is scope for utilizing the pond/water bodies near to household for cultivation of fish and allied aquatic species with proper planning for getting nutritional food and ensure additional income for self-sufficiency. Discussion is done on the important issues for fish cultivation which is as follows;

Preparation and maintenance of Pond:

Regarding fish cultivation in ponds, some points should be taken into consideration. The amount of slime in the pond should be less and no big/long trees should be present around the pond, especially in east and northern side. The long trees prevent the entry of sunlight

in the pond. Further the pond should be ideally square in shape. Some more points was also discussed which is as follows;



- Removal of weeds/unwanted aquatic plants
- Fish species like mud fishes & catfishes (*Sal*, *Boyal* etc.) should not be kept in the pond
- If the water is less in the pond, Rotenon medicine should not be given
- 100 kg Lime should be given per acre
- After re-excavation/excavation, water

should be entered after 3-4 days

- 10-15 kgs of Urea and 5-6 kgs of Tri-Sodium Phosphate should be used per acre of pond

Mixed fish cultivation:

The benefits of mixed fish/aquatic fauna cultivation is shared with the participants. Like;

- The mixed fish cultivation gives year round availability of different fish species
- It reduces the occurrence of fish diseases
- According to the ecosystem of ponds, due to mixed cultivation, foods from all the steps in a pond can be well utilized.
- The fish species get space in the pond which increases their growth.

Balanced diet for fish:

Regarding balanced and nutritious fish feed, the food materials should be given in the ponds which are light in weight and able to float.

Materials	Use in percentage (%)
Fish meal	10
Rice dust	53
Mustard cakes	30.5
Mixture of vitamin & minerals	0.50
Ground nut cakes	6

Diseases of fishes:

Interaction has been done on different diseases of fish species. Like occurrence of fish lice, tumour, degradation of fins, removal of scales, red spots, degradation of gall bladder, pest attack, floating fishes etc. Resource person explained the symptoms and necessary remedy of the diseases.

After that discussion and handholding demonstration is given on measuring pH at household level. The process is as follows; Put 2 table spoon of soil from pond in half cup of vinegar, if light effervescence occurs then it is to be understood that the pH of the pond water is between 7 -8. If high effervescence occurs then high alkalinity is present in the pond water. In that case, household activities like cleaning utensils, clothes etc. should be stopped in that pond.

Training Schedule:

Time	Topic	Methods	Materials
11am to 11:30am	Introduction	Participatory	
11:30am to 11:45am	Objective of training	Lecture	Flip Chart, Marker
11:45am to 1pm	Preparation of ponds	Lecture and interaction	Flip Chart, Marker
1-2 pm	Lunch		
2 to 2.45 pm	Mixed cultivation of fishes, Preparation of fish feed	Lecture and interaction	Flip Chart, Marker
2.45 to 3.30 pm	Diseases of fishes	Lecture and interaction	Flip Chart, Marker
3.30 to 4.00 pm	Feedback and evaluation of the day	interaction	

List of participants in sustainable aquaculture training:

Sl No	Village	Date	No of Participants	Staff & Resource person
1	Gobindapur	28/6/18	29	14
2	Ramganga	28/6/18	39	
3	Debichak	29/6/18	16	5
4	Mahendrapur	29/06/18	17	
5	Indraprastha	30/6/18	12	11
6	Gayadham	30/6/18	10	
7	Sagarmadhampur	30/6/18	13	
8	Daksin Shibpur	30/6/18	21	
		Total	157	30