

Model Program Book



SEMESTER INTERNSHIP

Designed & Developed by



**ANDHRA PRADESH
STATE COUNCIL OF HIGHER EDUCATION**

(A STATUTORY BODY OF GOVERNMENT OF ANDHRA PRADESH)

Scanned with OKEN Scanner



Scanned with OKEN Scanner

PROGRAM BOOK FOR
SEMESTER INTERNSHIP

Name of the Student: *Bedika. paran*

Name of the College: *Government Degree College(men) Srikakulam*

Registration Number: *2022001049012*

Period of Internship: From: *12-12-22* To: *16 - 3 - 23*

Name & Address of the Intern Organization *Fishery Development office
ilisupuram, erikakulam*

Ambdekar **University**
YEAR

An Internship Report on

Fisheries

(Title of the Semester Internship Program)

Submitted in accordance with the requirement for the degree of

Under the Faculty Guideship of

S. Ravibabu sir

(Name of the Faculty Guide)

Department of

Zoology, Government Degree college (men) Erikakulam

(Name of the College)

Submitted by:

Buddika · pavan

(Name of the Student)

Reg.No: 2022 001049012

Department of Zoology

(Name of the College)

Page No

Instructions to Students

Please read the detailed Guidelines on Internship hosted on the website of AP State Council of Higher Education <https://apsche.ap.gov.in>

1. It is mandatory for all the students to complete Semester internship either in V Semester or in VI Semester.
2. Every student should identify the organization for internship in consultation with the College Principal/the authorized person nominated by the Principal.
3. Report to the intern organization as per the schedule given by the College. You must make your own arrangements for transportation to reach the organization.
4. You should maintain punctuality in attending the internship. Daily attendance is compulsory.
5. You are expected to learn about the organization, policies, procedures, and processes by interacting with the people working in the organization and by consulting the supervisor attached to the interns.
6. While you are attending the internship, follow the rules and regulations of the intern organization.
7. While in the intern organization, always wear your College Identity Card.
8. If your College has a prescribed dress as uniform, wear the uniform daily, as you attend to your assigned duties.
9. You will be assigned a Faculty Guide from your College. He/She will be creating a WhatsApp group with your fellow interns. Post your daily activity done and/or any difficulty you encounter during the internship.
10. Identify five or more learning objectives in consultation with your Faculty Guide. These learning objectives can address:
 - a. Data and Information you are expected to collect about the organization and/or industry.
 - b. Job Skills you are expected to acquire.
 - c. Development of professional competencies that lead to future career success.
11. Practice professional communication skills with team members, co-interns, and your supervisor. This includes expressing thoughts and ideas effectively through oral, written, and non-verbal communication, and utilizing listening skills.
12. Be aware of the communication culture in your work environment. Follow up and communicate regularly with your supervisor to provide updates on your progress with work assignments.

Page No

13. Never be hesitant to ask questions to make sure you fully understand what you need to do your work and to contribute to the organization.
14. Be regular in filling up your Program Book. It shall be filled up in your own handwriting. Add additional sheets wherever necessary.
15. At the end of internship, you shall be evaluated by your Supervisor of the intern organization.
16. There shall also be evaluation at the end of the internship by the Faculty Guide and the Principal.
17. Do not meddle with the instruments/equipment you work with.
18. Ensure that you do not cause any disturbance to the regular activities of the intern organization.
19. Be cordial but not too intimate with the employees of the intern organization and your fellow interns.
20. You should understand that during the internship programme, you are the ambassador of your College, and your behavior during the internship programme is of utmost importance.
21. If you are involved in any discipline related issues, you will be withdrawn from the internship programme immediately and disciplinary action shall be initiated.
22. Do not forget to keep up your family pride and prestige of your College.

-----<<@>>-----

Page No

Student's Declaration

I, B. Pawan a student of Internship Program, Reg. No. 2022001849010 of the Department of Zoology College do hereby declare that I have completed the mandatory internship from 12-12-2022 to 16-3-2023 in Fisheries development (Name of the intern organization) under the Faculty Guideship of S. Ravibabu sir (Name of the Faculty Guide), Department of Zoology, Government Degree college (men) Srikakulam (Name of the College)

B. Pawan /16-3-2023
(Signature and Date)

Page No

Official Certification

This is to certify that Biddika, Javari (Name of the student) Reg. No. 2022001049112 has completed his/her Internship in Fisheries department (Name of the Intern Organization) on Fisheries (Title of the Internship) under my supervision as a part of partial fulfillment of the requirement for the Degree of B.Sc (Env) in the Department of Zoology - Govt. Degree college (Name of the College).

This is accepted for evaluation.



Endorsements

(Signature and Date and Seal)
I.K. GANGADHARA RAO
E.I.D. NO 010104 104
Fisheries Development Officer
Srikakulam Dist

Faculty Guide

Head of the Department

Principal

Page No

Government of Andhra Pradesh
Department of Fisheries.

Certificate from Intern Organization

This is to certify that B. Pawan (Name of the intern)
Reg. No 2022001049012 of Govt. Degree college [men] (Name of the
College) underwent internship in Department of fisheries (Name of the
Intern Organization) from 12-12-2022 to 16-3-2023

The overall performance of the intern during his/her internship is found to be
Very Good (Satisfactory/Not Satisfactory).



K. G. M. DILIP RAO
Authorized Signatory with Date and Seal
E.I.D. No: 1114
Fisheries Development Officer
Srikakulam Dist

Acknowledgements

I would like to thank all those people who helped me in successful completion of my internship programme with deepest sense of gratitude. I acknowledge the inspiring guidance, positive criticism and encouragement rendered by respectable FDO sir. Through the period his investigation and preparation of the project, I am really indebted for his valid suggestions, advices and help in collecting the project.

CHAPTER 1: EXECUTIVE SUMMARY

The internship report shall have a brief executive summary. It shall include five or more Learning Objectives and Outcomes achieved, a brief description of the sector of business and intern organization and summary of all the activities done by the intern during the period.

The Sustainable fisheries management project will be identify innovative for strengthening fisheries management. The goal of fisheries management event is to produce sustainable biological environment and Socioeconomic benefits from renewable aquatic resources. Resource conservation food production generation of economic wealth generation of reasonable income from fisheries, maintaining employment for fisheries, maintain viability of fishing communities are main objectives of fishery management. DOs and don'ts of fish culture selection and stocking of carp, introduction of some major crops.

CHAPTER 2: OVERVIEW OF THE ORGANIZATION

Suggestive contents

- A. Introduction of the Organization
- B. Vision, Mission, and Values of the Organization
- C. Policy of the Organization, in relation to the intern role
- D. Organizational Structure
- E. Roles and responsibilities of the employees in which the intern is placed.
- F. Performance of the Organization in terms of turnover, profits, market reach and market value.
- G. Future Plans of the Organization.

Department of fisheries Srikakulam is located at Kamarajamma street , Ilijipuram, Srikakulam, promotion and the development of fishing and fisheries and its associated activities including infrastructure development marketing , exports etc. welfare of fisherman and other fishes folk and strengthening of their livelihood are the main vision values of organisation , schemes included prime minister matayn Sampradaan Socio-economic welfare of fisheries and fish farmers by providing boats, nets , safety kits , nutritional support to fisherman families during fishing bars and lean periods.

CHAPTER 3: INTERNSHIP PART

Description of the Activities/Responsibilities in the Intern Organization during Internship, which shall include - details of working conditions, weekly work schedule, equipment used, and tasks performed. This part could end by reflecting on what kind of skills the intern acquired.

The sustainable fishery management project, will be identify innovative, cost effective mechanisms for Strengthening fishery management capacity in accord with strategic centers to management capacity in accord with strategic centers to modernize the role of public sector in this we have learned about the pond management selection of Shrimp fodder given to fish, record maintenance water quality of pond etc.. major carps include catla, rohu, mrigal and about their breeding and feeding habits and management capacity of secretariat of agriculture like stock, fisheries and food, particularly those testing quality salinity of water, skills acquired during project include management of fishes lab equipment of fishery department.

ACTIVITY LOG FOR THE FIRST WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day -1	Pond preparation : The opt-size pond is rectangular size	fish yield in pond can affected by various factors in pond.	beg
Day -2	Soil & water : The soil type of pond and its fertility is necessary	it controls pond stability, pH, Salinity of water	beg
Day -3	aquatic weeds : they not only take away nutrients but also upset O ₂ balance	if left unchecked may choke water body posing serious to fishes	beg
Day -4	Unwanted fishes / predators : They may be unwanted fishes & predators were there	They compete with culture fish for feed / nutrients	beg
Day -5	Lining : Lining should be done to ponds based on variety of culture	Causing in CO_2 , (CaCO_3) , (CaMg) , $(\text{CO}_3)_2$	beg
Day -6	Fertilizers : plays a crucial role in fish culture	Ammonium phosphate (20-30 kg/ha)	beg

WEEKLY REPORT

WEEK - 1 (From Dt. 12.12.2022 to Dt. 17.12.2022)

Objective of the Activity Done:

Detailed Report:

Preparation of ponds :- Opt size of the pond is rectangular with size varying from 0.1 - 2.0 hectares. with dept vary from 2.0 to 3.0 metres .the soil type of pond and its fertility states for fresh water fishes especially carp is alluvial soil with neutral pH range b/w 7.5 - 8.0 the pH has brought to control if the pond soil and water are saline alkaline.

The aquatic weed in fish pond are undesirable they not take away nutrients but also upset oxygen balance in water by release CO₂ into pond during night.

The unwanted fishes or predators may be predatory they can be eliminated through repeated netting of ponds.

The type of lime to be used depend on water pH it is recommended the lime [carmy (CO₃)₂]

Organic fertilizers ammonium phosphate (16:20:0) can be used at 20.30 kg /ha.

ACTIVITY LOG FOR THE SECOND WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day -1	Selection of male and female fishes are introduced for breeding season.	Released eggs (1-10 days) is known as spawn.	<i>[Signature]</i>
Day -2	Spawn -(20-25 days) is called fry (20-40)-ad- cutage.	Fry should shifted to rearing tank.	<i>[Signature]</i>
Day -3	Stunted fingerlings: High amount of dead fish culture called stunted fingerlings.	High priority given for this.	<i>[Signature]</i>
Day -4	feeding: General feed should give at morning and evening routine.	On 6 th day food protein egg-feed	<i>[Signature]</i>
Day -5	water management: measures should be taken to ensure adequate water & soil quantity	measures should be adopted to prevent fish from stress.	<i>[Signature]</i>
Day -6	Kacha nursery: A divided fry added to kacha nursery.	Farmed management practice.	<i>[Signature]</i>

WEEKLY REPORT

WEEK - 2 (From Dt. 19-12-22 to Dt. 26-12-22)

Objective of the Activity Done:

Detailed Report:

Selection of About 15-20 days old for the initial monitoring. Selected species of crop are introduced into pond when several species of fishes are reared together in pond in an intensive way.

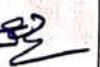
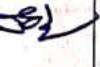
The survival of fingerlings introduced into particular pond depends very much on their size. Bigger the size it should have size of 10-15 cm. From the temperature point of view the best time of stocking of pond will be when water in the pond is within the opt. range of 20-30°C. Obviously temperature below 30°C will affect the growth of fish. Feeds for the culture may be one of 2 types - natural & artificial feeds and prohibition also. The natural growth of feeding in pond can be increased by regulators.

Measuring

In water management all paper depth of water should be maintained harvesting can be done either by partially draining water out of pond by repeated netting.

Page No

ACTIVITY LOG FOR THE THIRD WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	Introduction to major crops : cetta ; large and broad head protruding jaw	Rearing (u-column)	
Day - 2	Feed fingerlings . consume some plankton , algae , zooplankton	Adult - free mainly on the surface	
Day - 3	Rohu : Colored fish with dark scales on its upper body	Rearing (m-column)	
Day - 4	Feed zooplankton . phytoplankton .	Freshwater growth booster help in fast growth	
Day - 5	Mrigal I Grows a very fine fish covered with cycloid scales , snout blunt .	Rearing (S- Column)	
Day - 6	Feed plankton feeder debris found in bottom	Bottom feeder	

Page No

WEEKLY REPORT

WEEK - 3 (From Dt 27.-12-22 to Dt 3.-1-23...)

Objective of the Activity Done: Introduction of major crops.

Detailed Report:

Catla fish:-

Catla fish has a large round broad head, with a large projecting lower jaw, and upturned mouth. It has large greyish scales on its dorsal side and white on its belly. It reaches up to 182 cm in length and 38 kg wt.

→ It is a surface and mid water feeder.

→ Adults feed on zooplankton and phytoplankton
other fish:

Rohi fish has small head, sharp fierce, lower tip is frill like long circular body covered with scales. It has max length of 1m.

→ food is in form of pellet, protein etc.

Mrigal fish :-

Mrigal fish are long, upper lip curved to down, pair of thin body is silver colored. Avg body length about meters.

ACTIVITY LOG FOR THE FORTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day -1	Salinometer : Device used to measure salinity in solution	Read out the % of salt in solution.	
Day -2	pH meter :- It measures hydrogen ion activity in water	neutral : pH = 7 acidic : pH = < 7 basic : pH = > 7	
Day -3	Nitrate test :- Indicates high nitrate level in ponds	Low nitrate : Im- proves health of fish.	
Day -4	Test :- 5 drops of reagent A / B in a test-tube and shake it well.	Red or pink : Nitrate reducing red-violet : presence of nitrate	
Day -5			
Day -6			

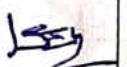
WEEKLY REPORT

WEEK - 4 (From Dt. 4.1.23. to Dt. 11.1.23.)

Objective of the Activity Done:	Laboratory
Detailed Report:	Salinometer.
	It is a device used to measure salinity or the content of solution.
	It is specially a calibrated hydrometer to read out % of salt in solution.
	pH meter :-
	A pH meter measures hydrogen ion activity in water based solution.
	Indicates acidity of solution
	Neutral solution pH = 7
	Acidic solution : pH < 7
	Basic solution pH > 7
	Nitrate test :-
	High nitrate levels in ponds indicate build up of fish waste
	Low nitrate : impairs health of fish
	High nitrate : increase of Algae poor quality

Page No

ACTIVITY LOG FOR THE FIFTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day -1	Selection of Shrimp : Sampling is most imp factor in sele- ction of juveniles	Dont's Stocking shouldn't be check quality of fry	
Day -2	Folder : Fresh folder with good nutrient value sh- ould be selected and purchased	Dont's folder should be fed without calculating FCR	
Day -3	water ownership before Stock water quality should be test in lab	Dont's without testing quality shrimp fry should not be released	
Day -4	Aeration Additional aeration must be paper coverage & because few Shrimp require lot of vital gas	Dont's : High density cultivation should not be done with- out aeration	
Day -5	Health ownership Biosec- urity arrangements should be regularly reviewed	Dont's The fence around pond and bird net should not be torn	
Day -6	Hed : planning should be done based on market demand.	Dont's Don't caught without paper plan- ning Caught on full moon days	

WEEKLY REPORT

WEEK - 5 (From Dt. 9-1-23 to Dt. 16-1-23)

Objective of the Activity Done:

Do's and Don'ts in culture.

Detailed Report:

A. After stress tests microscope and PCR test for shrimps quality road is selected and stocked
Don't :- shrimp fry should not be purchased from hatcheries not recognized by CCA

Fertilizer :- fresh fertilizer with equal nutrient value should be selected

Don't :- Do not use cheap fertilizer

water ownership :- check standard ranges OR pH should be checked every morning

Don't :- In saline ponds there is no need to add minerals every week.

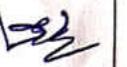
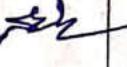
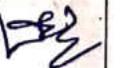
Aeration :- Depending on no of aeration ponds should be arranged in 2 cycles.

Health ownership :- probiotics use a major part of Aeration process in check pond should be checked

Don't :- Sometimes use in pond should not use in other pond.

Page No

ACTIVITY LOG FOR THE SIXTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	Complete fish farming culture is take up from the process of spawning to full size	Farms have tanks, hatcheries, nurseries, rearing, collection ponds	
Day - 2	Restricted fish farming. Culturing only one stage in life cycle of fish	ponds are created only for production of spawn (seed) fullsize fish	
Day - 3	Extensive fish farming. Fish depend upon the natural feed for growth	productivity is directly proportional to available natural feed	
Day - 4	Intensive fish farming. Fish are provided with artificial seeds	Achieving maximum productivity by providing artificial food	
Day - 5	Traditional fish culture most common method of fish culture	artificial constructed ponds where freshwater and shell fish are reared	
Day - 6	Semi-intensive fish farming. Both natural and artificial feed supplied to fish	it required inputs of fertilization and supplementing feeding	

Page No

WEEKLY REPORT

WEEK - 6 (From Dt. 19-1-22 to Dt. 25-1-22.)

Objective of the Activity Done:

Different types of fish-farming techniques

Detailed Report:

Besides traditional ways, fish-a-culture
in artificial ponds to meet internal and external
demand by regulating additional mesh growth and
breeding efforts are made to achieve high production.

Complete fish-farming culture is taken up
from the process of spawning to the stage of attaining
maximum size culture centers will have breeding
tanks, hatcheries, nursery ponds, rearing ponds,
production ponds etc. Restricted fish-farming is.

Culturing any one of the stages in the life cycle of
fish in the ponds concerned with high yields.

extensive and intensive farming techniques
are fish depend on natural feed and artificial
feed for growth and survival respectively.

Page No

ACTIVITY LOG FOR THE SEVEN WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day -1	Hatching tanks :- Cement tanks with an area of $5 \times 1.5 \text{ m}^3$	tanks used for breeding the pawns and larval development	
Day -2	Selection & transport of breeders. Prawns measuring about 18-20 cm	Fully grown and sexually mature breeder prawns are used	
Day -3	Prevention from parasitic infections : By chemical bath	Chemical bath & Supply of sterilized feed prevents infections	
Day -4	Feed : Green algal cells without parasites in formation are provided	Green algal cells are provided as feed.	
Day -5	Stocking : about 60 adult prawns are stocked for breeding in above tanks.	Ratio of male and female shrimps are 1:1 or 1:2	
Day -6	Breeding and Spawning occur during night time just 60 cm above the bottoms	Mating can be stimulated by presence of spaw	

Page No

WEEKLY REPORT

WEEK - 7 (From Dt. 27-1-23 to Dt. 2-2-23.)

Objective of the Activity Done:

Management of hatchery tanks in prawn production.

Detailed Report:

production.

Construction of hatchery tanks, selection and transport of brooders, feed and preventive measures for parasite infection rate discussed in this week as prawn management criteria in prawn production.

Hatching tanks are plastic tubs of 0.9 to 1 tonne capacity or cement tubes with an area of $5 \times 1.5 \text{ m}^2$. Fully grown and sexually mature brooder prawn measuring about 18.20 cm are selected from the sea water or culture centre. Selected from the sea water or culture centre selected polythene bags filled with $\frac{1}{3}$ marine water and $\frac{2}{3}$ oxygen.

Selected brooders are given chemical bath to prevent parasite infections. If provided with sterilized feed green algal cells without parasite infection are provided as feed.

Page No

ACTIVITY LOG FOR THE EIGHTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day -1	Reservoir or head pond:- These are constructed near perineal water source.	It's the main pond supply of water to different ponds.	
Day -2	Hatching ponds:- Constructed near the main culture pond	Fertilized eggs develop into fry stage into ponds	
Day -3	Nursing ponds:- about 4 to 5 nursing ponds of 15x15x1.2m size.	Fish Fry of 3-4 days age is released into these ponds	
Day -4	Rearing ponds:- one 25x10x1.5 m size 11-12 ponds are constructed	Fish Fry of 30 days are further grown in rearing ponds	
Day -5	Production ponds:- These are permanent in nature 91x50x3.5m in size	Small fishes are grown up to maximum size.	
Day -6	Stocking pond:- Size 25mx10mx1.75m	Fully grown fishes & breeders are stocked till they are disposed	

WEEKLY REPORT

WEEK - 8 (From Dt. 3-2-23, to Dt. 9-2-23)

Objective of the Activity Done:

Various types of ponds.

Detailed Report:

Fish farm necessary for artificial culture should possess the following ponds for keeping up various stages seen in development for fish. Each one of it has its own character to be followed strictly to achieve good yield.

Reservoir ponds supply water to different ponds all through the year. Fertilized eggs are developed into fry stage in hatching ponds. Holes made up of mosquito net also used for breeding fish. Fry of 3-4 days age is released into nursing ponds for growing. Then for 30 days fish fry of 30 days age are further grown in rearing ponds of $25 \times 10 \times 1.5$ m size. These are generally stocked in high density. After into production ponds up to attaining maximum marketable size.

Page No

ACTIVITY LOG FOR THE NINETH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	Temperature : Fishes are poikilothermic organisms	Temperature has influence on growth respiration & reproduction	
Day - 2	Depth of pond : physico-chemical factor changes based on depth of the pond	Light cannot penetrate too deep resulting in absence of producers	
Day - 3	Turbidity : clay, sand & other floating particles reduce the transparency of water	poor penetration of light, flood waters highly turbid	
Day - 4	Light :- penetration of light into water depends upon intensity of light	Aquatic plants :- plankton silhouette prevent the penetration of light	
Day - 5	Water current : fishes generally traces only in following water	Hence waves of water currents formed due to the exit of water increase	
Day - 6	Short conditions :- a wide pond increases the area of water.	Aquatic plants along the shore able to synthesize more food.	

WEEKLY REPORT

WEEK - 9 (From Dt.10-2-23 to Dt.17-2-23.)

Objective of the Activity Done:

Influence of physical factors in fish ponds

Detailed Report:

primary physical pond-factors influencing the productivity are temperature, depth of the pond, transparency of water, light and water movements.

Temperature has influence over respiration, growth and reproduction of fish. Fish are poikilothermic organisms whose body temperature changes in accordance with temperature of the medium. Increase in temperature reduces the dissolved oxygen content.

An ideal pond should have a depth of 2 meters - physico-chemical factors change basing on the depth. Turbid water containing soil & clay particles entangled between the gill filaments causing obstacle for respiration. Light is the most important factor for productivity. Waves and water currents formed due to the entry and exit of water contribute to the increased productivity due to availability of high dissolved oxygen.

Page No

ACTIVITY LOG FOR THE TENTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day -1	Hydrogen ion concentration, pH :- it is based on dissolved substrate	pH of 6.8 - 9.6 result in high productivity of pond.	
Day -2	Dissolved oxygen ; depleted oxygen is regenerated from photosynthesis	productivity of pond depends upon availability of regeneration of oxygen	
Day -3	Carbon dioxide : It is released by aquatic organisms during respiratory process	CO ₂ required for photosynthesis & over concentration of CO ₂ kills fishes.	
Day -4	Nutrients ; necessary for growth of organisms.	When nutrients are plenty yield will be very high	
Day -5	Hardness of water : depends up on dissolved calcium and magnesium salts.	grows better at hardness of 15 ppm Should grow at less than 5 ppm	
Day -6	Other chemicals : CaCO ₃ , Nitrates, Ammonia, Sulphates & phosphates.	CaCO ₃ necessary for growth of bones remaining nutrients enhanced	

WEEKLY REPORT

WEEK - 10 (From Dt. 21.2.23 to Dt. 27.2.23.)

Objective of the Activity Done:	Chemical fractions in fish ponds.
Detailed Report:	<p>Hydrogen ion concentration influenced oxygen, carbon dioxide, nutrients, hardness of water and other minerals of the pond influence the growth and productivity of the fish.</p> <p>pH of 6.8-9.0 result in high productivity of the pond deficiency water vs. water, turbid water, decrease the pH and increase acidity. A pH of less than 6.9 more than 10.8 results in mortality of the organism.</p> <p>productivity of ponds depend upon the availability and regeneration of oxygen content in the ponds is increased by using aerators CO₂ is required for photosynthesis but over concentration of CO₂ may result in causing mass mortality of aquatic organisms.</p> <p>nutrients are necessary for growth of organisms minor elements are necessary like copper, nickel, manganese, zinc & salts formed of Na, K, Mg, Ca, Fe in the form of sulphates, phosphates, nitrates and carbonates.</p>

Page No

ACTIVITY LOG FOR THE ELEVENTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	Integrated fish farming & aquaculture fish is associated with other agriculture & poultry	Fish wastes fertilize the crop fields & cattle were there, crops were good.	
Day - 2	Fish-prawn culture prawn can be cultured in ponds primarily meant for carp culture	Excrete of carp forms food for prawns extra income we can earn	
Day - 3	Fish-poultry here poultry farm is constructed over a flat farm built of bamboo sticks.	This facility the direct fertilization of pond by droppings of chicken	
Day - 4	Rice + Fish culture simultaneously: Rice Varieties ADT ₆ , ADT ₇ .	Chamre - Striped clarias esculentus are generally grown along with rice	
Day - 5	Rotational Rice & fish culture: Rice fields are converted to fish culture ponds after harvesting	Soil becomes fertile with excreta of fish improves rice yield.	
Day - 6	Coconut + Banana + fish culture canals between the rows of plants are utilised for fish culture	It provides continuous water & plants of utilization of space and gives additional income.	

WEEKLY REPORT
WEEK - 11 (From Dt. 29-2-23 to Dt. 6-3-23.)

Objective of the Activity Done:

Detailed Report:

Integrated fish-farming technology.

Culturing the fish is associated with rearing cattle or ducks or chicks or pigs or prawns is called integrated. When mixed culture fish wastes are fertilized the crops and poultry chicks are used as feed by fish. Initially these farming methods may yield low income but integrated farming techniques methods may multiple production of nutritional value and economic significance.

Prawns can be cultured in ponds primarily meant for carp culture. Carp are not predators, their excreta form food for prawns thus facilitating additional income of Rs 10,000 per hectare. Fish pottery is also a better integrated farming as pottery waste are used as food for the fish.

ACTIVITY LOG FOR THE TWELVETH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	Cotton mouth disease :- This is caused by infection of <i>streptococcus</i> .	characteristic growth of white cotton like filaments around the mouth	
Day - 2	Furunculosis :- This is caused by infection of <i>Enteromonas salmonicida</i> .	Blisters with water or pus are formed at the site of infection.	
Day - 3	Tuberculosis :- This is due to infection by <i>Mycobacterium</i> .	disease is identified by firm warts on body blisters loss of weight	
Day - 4	Dropsy: initially it is due to viral infection & secondary infection.	bulging of belly due to accumulation yellow colour liquid in body cavity	
Day - 5	Columnomia :- This is due to infection of bacteria <i>Acinetobacter columnaris</i>	identified by formation of spots over body scales fall off.	
Day - 6	prophylactic measures :- By using antibiotics & probiotic we can prevent infection.	Chemical bath of infected fish & use of antibiotics. fish can be cured	

Page No

WEEKLY REPORT

WEEK - 12 (From Dt. 7-8-23 to Dt. 15-8-23)

Objective of the Activity Done: Bacterial diseases & prophyltic measures

Detailed Report:

Bacteria, viruses, protozoan are common parasite seen harboring the fish. Infection are common parasite related to growth & sometimes death of fishes which leads to loss for cultivators.

Cotton mat disease, furunculosis, fin or tail rot disease, tubercular disease, columnaris are the various bacterial disease of fish. Their symptoms are like warts on body, blisters over the internal organs, spots over the body, broken fin rays & cottony white mat & mass mortality of fishes also sometimes seen due to these bacterial disease, their symptoms vary from different bacterial diseases.

Measures:- General always used to cure the disease are Sulphonamides, sulphadiazine, Sulphamerazine etc. Infections can be prevented by mixing antibiotics like chloramphenicol, tetracycline, erythromycin etc... Chemical bath of infected fishes cure the disease maintaining prints and cure.

Page No

CHAPTER 5: OUTCOMES DESCRIPTION

Describe the work environment you have experienced (in terms of people interactions, facilities available and maintenance, clarity of job roles, protocols, procedures, processes, discipline, time management, harmonious relationships, socialization, mutual support and teamwork, motivation, space and ventilation, etc.)

Good environment very important for learning and doing job in any other work . good environment is always boost up your interest . A working environment is the setting social features and physical features in which you perform your job these elements can impact feelings of well being workplace relationships, collaboration and efficiency and employee health . the office more comfortable and improving your community . the work environment impacts many moods , drive , mental health & performance . my confidence is increased , overall environment is good at fishery department through positively influencing entire work environment . The office is more comfortable improve my communication & feel . there is a good interaction at dept . minfaciltiis - to learn there is enough . try fix time from morning to evening for classes and framed timetable accordingly .

Describe the real time technical skills you have acquired (in terms of the job-related skills and hands on experience)

Internships provide valuable personal experience and allow us to test theories and concepts we have been introduced to throughout our college career. Skills we have picked up during course are as follows:

Real time skills:

- ① communication
- ② collaboration
- ③ time management
- ④ critical thinking
- ⑤ patience.

Technical skills:

- ① Data collection
- ② Harvest time
- ③ Data entry
- ④ Fish entry
- ⑤ Laboratory equipment
- ⑥ fish culture

Describe the managerial skills you have acquired (in terms of planning, leadership, team work, behaviour, workmanship, productive use of time, weekly improvement in competencies, goal setting, decision making, performance analysis, etc.

- Open communication and mutual support are 2 characteristics of good team work contribute to increased job satisfaction and active management of idea sharing among the people.
- A successful and qualified intern needs to have willingness to learn.
- Internship are introduction to career fields that have the capacity to teach really valuable lessons for an intern's future career path.
- It teaches us to be great listeners who know how to take decisions.
- Showing willingness to learn work experience at field to offer the most employees.
- Giving learning opportunities that comes a long way for motivate oneself with various aspects of related areas.

Describe how you could improve your communication skills (in terms of improvement in oral communication, written communication, conversational abilities, confidence levels while communicating, anxiety management, understanding others, getting understood by others, extempore speech, ability to articulate the key points, closing the conversation, maintaining niceties and protocols, greeting, thanking and appreciating others, etc.)

Think before you speak.

Always pause before you speak, not saying the 1st thing that comes to mind. Take a moment and pay close attention to what you say and how you say it.

Written things down.

Take a note while you are talking to another person or when you are in a meeting in the internship.

Body language matters.

This is important for face to face meeting and for also video conference make sure that appearaceable so have open body language, keep an eye contact.

Maintain a positive attitude.

Your positive attitude will shine through and other person will know it and helps in people will respond positively to you.

Describe how could you enhance your abilities in group discussions, participation in teams, contribution as a team member, leading a team/activity.

Importance of interpersonal skills

- Interpersonal skills reflect ability of individual to interact with other members of group in a brief situation
- Emotional maturity and balance promote good interpersonal relationships.
- The person has to be more centric and less self-centred

Importance of presentation skills

Presentation is an effective way to communicate a large no. of people at some skill.

Leadership skill

Ability to take leadership roles and lead, inspire/carry team along to help them to achieve groups objectives

Analytical skills

Ability to analyze and provide others to see problem from multiple perspective without hurting members.

Describe the technological developments you have observed and relevant to the subject area of training (focus on digital technologies relevant to your job role)

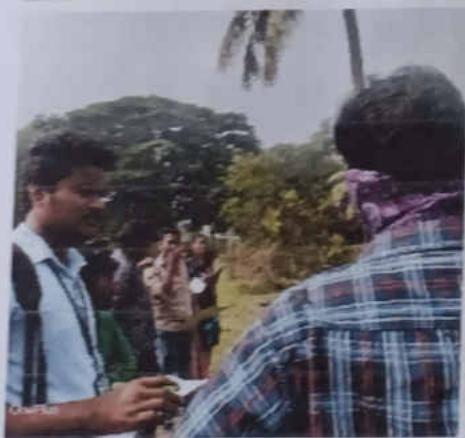
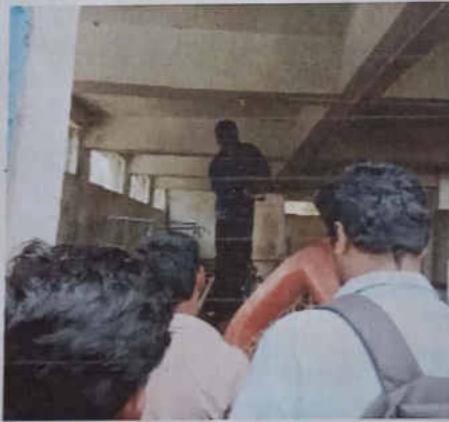
Technological development includes equipment and practices used for finding, harvesting, handling, processing and distributing of aquatic resources & their products. Processing technology helps reduce food loss and waste, thus reducing pressure on fisheries resources and fostering sustainability of sector, processing often results in quantity of by-products. Harvesting of aquatic resources and production is done either in wild or in controlled environment. Estimation can be made quickly meaning fish spend less time out of the water increasing their survival rate. Useful technologies for improving product SNPs have been emerged as genotyping technology which is widely used lab equipment like salinometer.

Page No

THE

BEST THING

TO HOLD ONTO IN LIFE IS EACH OTHER



Student Self Evaluation of the Short-Term Internship

Student Name: *B. Pavan*

Registration No: *2022001049012*

Term of Internship: From: *12-12-22* To: *16-3-2023*

Date of Evaluation: *16-3-2023*

Organization Name & Address: *Fishery development office, ilicapuram
Srikakulam*

Please rate your performance in the following areas:

Rating Scale: Letter grade of CGPA calculation to be provided

1	Oral communication	1	2	3	4	5
2	Written communication	1	2	3	4	5
3	Proactiveness	1	2	3	4	5
4	Interaction ability with community	1	2	3	4	5
5	Positive Attitude	1	2	3	4	5
6	Self-confidence	1	2	3	4	5
7	Ability to learn	1	2	3	4	5
8	Work Plan and organization	1	2	3	4	5
9	Professionalism	1	2	3	4	5
10	Creativity	1	2	3	4	5
11	Quality of work done	1	2	3	4	5
12	Time Management	1	2	3	4	5
13	Understanding the Community	1	2	3	4	5
14	Achievement of Desired Outcomes	1	2	3	4	5
15	OVERALL PERFORMANCE	1	2	3	4	5

Date:

B. Pavan
Signature of the Student

Evaluation by the Supervisor of the Intern Organization

Page No

Student Name: B. pavav

Registration No: 2022001049012

Term of Internship: From: 12-12-22

To: 16-3-2023

Date of Evaluation: 16-3-2023

Organization Name & Address: Fishery development office, Elipapuram

Name & Address of the Supervisor K. Gangadharao FDO, Srikakulam
with Mobile Number
9866089765

Please rate the student's performance in the following areas:

Please note that your evaluation shall be done independent of the Student's self-evaluation

Rating Scale: 1 is lowest and 5 is highest rank

1	Oral communication	1	2	3	4	5
2	Written communication	1	2	3	4	5
3	Proactiveness	1	2	3	4	5
4	Interaction ability with community	1	2	3	4	5
5	Positive Attitude	1	2	3	4	5
6	Self-confidence	1	2	3	4	5
7	Ability to learn	1	2	3	4	5
8	Work Plan and organization	1	2	3	4	5
9	Professionalism	1	2	3	4	5
10	Creativity	1	2	3	4	5
11	Quality of work done	1	2	3	4	5
12	Time Management	1	2	3	4	5
13	Understanding the Community	1	2	3	4	5
14	Achievement of Desired Outcomes	1	2	3	4	5
15	OVERALL PERFORMANCE	1	2	3	4	5



Page No

GANGADHARA RAO
Signature of the Supervisor
FISHERIES DEVELOPMENT OFFICER
SRIKAKULAM DIST

Internal & External Evaluation for Semester Internship

Objectives:

- Explore career alternatives prior to graduation.
- To assess interests and abilities in the field of study.
- To develop communication, interpersonal and other critical skills in the future job.
- To acquire additional skills required for the world of work.
- To acquire employment contacts leading directly to a full-time job following graduation from college.

Assessment Model:

- There shall be both internal evaluation and external evaluation
- The Faculty Guide assigned is in-charge of the learning activities of the students and for the comprehensive and continuous assessment of the students.
- The assessment is to be conducted for 200 marks. Internal Evaluation for 50 marks and External Evaluation for 150 marks
- The number of credits assigned is 12. Later the marks shall be converted into grades and grade points to include finally in the SGPA and CGPA.
- The weightings for Internal Evaluation shall be:
 - Activity Log 10 marks
 - Internship Evaluation 30 marks
 - Oral Presentation 10 marks
- The weightings for External Evaluation shall be:
 - Internship Evaluation 100 marks
 - Viva-Voce 50 marks
- The External Evaluation shall be conducted by an Evaluation Committee comprising of the Principal, Faculty Guide, Internal Expert and External Expert nominated by the affiliating University. The Evaluation Committee shall also consider the grading given by the Supervisor of the Intern Organization.
- Activity Log is the record of the day-to-day activities. The Activity Log is assessed on an individual basis, thus allowing for individual members within groups to be assessed this way. The assessment will take into consideration

Page No

- the individual student's involvement in the assigned work.
- While evaluating the student's Activity Log, the following shall be considered -
 - a. The individual student's effort and commitment.
 - b. The originality and quality of the work produced by the individual student.
 - c. The student's integration and co-operation with the work assigned.
 - d. The completeness of the Activity Log.
 - The Internship Evaluation shall include the following components and based on Weekly Reports and Outcomes Description
 - a. Description of the Work Environment.
 - b. Real Time Technical Skills acquired.
 - c. Managerial Skills acquired.
 - d. Improvement of Communication Skills.
 - e. Team Dynamics
 - f. Technological Developments recorded.

Page No

INTERNAL ASSESSMENT STATEMENT

Name Of the Student: *B. Savan*

Programme of Study: *Internship*

Year of Study:

Group: *III B. E. C (Em)*

Register No/H.T. No: *2022001049012*

Name of the College: *Government Degree college (men) srikakulam*

University: *Dr. B.R. Ambedkar university.*

Sl.No	Evaluation Criterion	Maximum Marks	Marks Awarded
1.	Activity Log	10	
2.	Internship Evaluation	30	
3.	Oral Presentation	10	
	GRAND TOTAL	50	

Date:

Signature of the Faculty Guide

Page No

EXTERNAL ASSESSMENT STATEMENT

Name Of the Student: *B. Pavan*

Programme of Study: *Internship*

Year of Study:

Group: *III B.Sc B.Z.C (Em)*

Register No/H.T. No: *2022001049012*

Name of the College: *Government Degree college (men) SriKakulam*

University: *D.Y. B.R. Ambedkar university.*

<i>Sl.No</i>	<i>Evaluation Criterion</i>	<i>Maximum Marks</i>	<i>Marks Awarded</i>
1.	Internship Evaluation	80	<i>75</i>
2.	For the grading giving by the Supervisor of the Intern Organization	20	<i>19</i>
3.	Viva-Voce	50	
	TOTAL	150	
GRAND TOTAL (EXT. 50 M + INT. 100M)		200	

Signature of the Faculty Guide

Signature of the Internal Expert **GANGADHARA RAO**
 E.I.D. No: 0104104
 Fisheries Development Officer
 SriKakulam Dist

Signature of the External Expert

Signature of the Principal with Seal

Page No



**ANDHRA PRADESH
STATE COUNCIL OF HIGHER EDUCATION**

(A Statutory Body of the Government of Andhra Pradesh)

2nd, 3rd, 4th and 5th floors, Neeladri Towers, Sri Ram Nagar, 6th Battalion Road
Atmakur (V) Mangalagiri (M), Guntur, Andhra Pradesh, Pin - 522 503
www.apsche.ap.gov.in