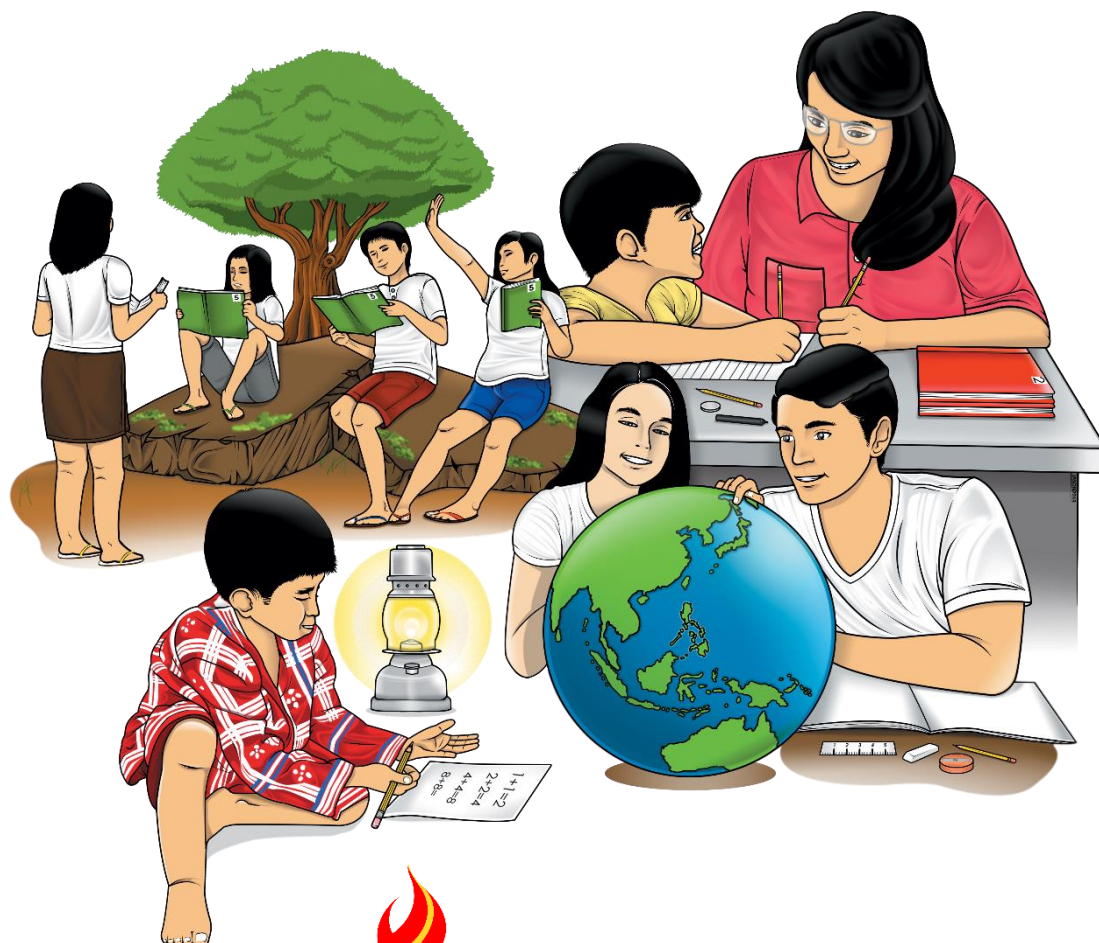


Technology and Livelihood Education

Agri-Fishery Arts

Module 13: Monitoring Fish Raising Project



TLE – Agri-Fishery Arts – Grade 6
Alternative Delivery Mode
Module 13: Monitoring Fish Raising Project
First Edition, 2020

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Published by the Department of Education
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Undersecretary: Diosdado M. San Antonio

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Printed in the Philippines by _____
Department of Education – Region VI

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Technology and Livelihood Education

Agri-Fishery Arts

**Module 13: Monitoring Fish
Raising Project**

Introductory Message

This Self-Learning Module (SLM) is prepared so that you, our dear learners, can continue your studies and learn while at home. Activities, questions, directions, exercises, and discussions are carefully stated for you to understand each lesson.

Each SLM is composed of different parts. Each part shall guide you step-by-step as you discover and understand the lesson prepared for you.

Pre-tests are provided to measure your prior knowledge on lessons in each SLM. This will tell you if you need to proceed on completing this module or if you need to ask your facilitator or your teacher's assistance for better understanding of the lesson. At the end of each module, you need to answer the post-test to self-check your learning. Answer keys are provided for each activity and test. We trust that you will be honest in using these.

In addition to the material in the main text, Notes to the Teacher are also provided to our facilitators and parents for strategies and reminders on how they can best help you on your home-based learning.

Please use this module with care. Do not put unnecessary marks on any part of this SLM. Use a separate sheet of paper in answering the exercises and tests. And read the instructions carefully before performing each task.

If you have any questions in using this SLM or any difficulty in answering the tasks in this module, do not hesitate to consult your teacher or facilitator.

Thank you.



What I Need to Know

Fish farming is a form of aquaculture in which fish are raised as a means of livelihood. Fish is one of the most important parts of Filipino diet. In fact, fish and rice are commonly served in every dining table, among rural and urban families. The availability, nutritional content, cheaper cost and abundance of fish in the market have made it popular in the Filipino diet. In addition, health-conscious Filipinos are now turning to fish as a major source of high-quality protein without the presence of saturated fat found in meat which is not good for the health.

After going through this module, you are expected to:

1. Implement plan on fish raising.
 - 1.1 monitors growth and progress;
 - 1.2 keeps an updated record of growth and progress; and
 - 1.3 expands/enhances one's knowledge of fish raising using the internet.



What I Know

In this activity, you are tasked to answer questions of what you have already known about implementing plan on fish raising.

I. Directions: Read the statement carefully. Choose the correct answer from the word/s found inside the box. Write your answer on a separate sheet of paper.

fish stocks	fingerlings	internet	monitor
progress	investments	pond	

- _____ 1. Good source of free information about fish culturing
- _____ 2. It is also known as supply of fish
- _____ 3. Another name referring to small fish
- _____ 4. Keeping record and listing of the weight gain weekly/monthly
- _____ 5. Money put up for a business to gain profit.
- _____ 6. It can reproduce all year round and requires no special kind of feeds.
- _____ 7. Watching instructional videos online and attending seminars regarding fish raising.

II. Directions: Study the chart of Mr. Gayosa's monthly sampling of his milkfish status below and answer the questions that follow. Write your answer on a separate sheet of paper.

Date of Sampling	Sampling	Weight	Length
11-07-19	Stocking Period		
12-07-19	1 st	0.40 kl	5 inches
01-07-20	2 nd	0.50 kl	7 inches
02-07-20	3 rd	0.80 kl	10 inches
03-07-20	4 th	0.95 kl	12 inches
04-07-20	Harvesting Period		

8. In what date does the growth is very slow?
9. In what date does the growth is very good?
10. Is the chart helpful in collecting and interpreting data?

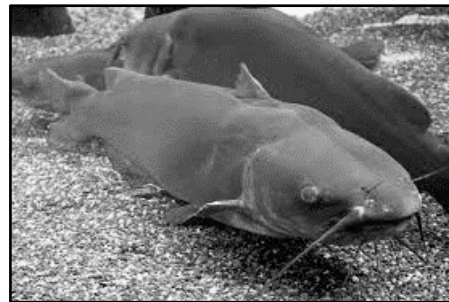
Lesson

1

Implementing Plans on Fish Raising



Tilapia



Catfish



Milkfish

¹ Bernard Spragg. NZ, Free Royalty, <https://www.flickr.com/photos/volvob12b/18418215776>



What's In

Animal and fish raising is one of the sources of livelihood of many Filipinos, especially in the rural areas. In this activity, kindly check the different given fish or any seafood products that are found and raised in your community.

- _____ 1. Bangus (Milkfish)
- _____ 2. Tilapia (Tilapia)
- _____ 3. Hito (Catfish)
- _____ 4. Dalag (Mudfish)
- _____ 5. Talaba (Oyster)
- _____ 6. Tahong (Mussel)
- _____ 7. Alimasag (Crab)
- _____ 8. Alimango (Mud Crab)
- _____ 9. Kabibi, Kabibi, Tulya (Clams)
- _____ 10. Hipon (Shrimps)
- _____ 11. Sugpo (Prawns)
- _____ 12. Kuhol (Snails)



What's New

Read the situation below and find out how much you understand by answering the guide questions.



Mr. Corpuz bought a pond from his retirement. He was planning to engage himself in fish farming but did not have enough knowledge on how to raise the project. So, Mr. Corpuz asked for suggestions from experienced farm growers and surfed the internet to gain knowledge about the updated studies and researches on fish farming. He also sought help from government agencies concerned with fish farming on how to monitor and record the growth and progress of his project in case he could decide to start his plan.

After reading the situation, answer the following questions to deepen your understanding.

1. What did Mr. Corpuz plan to have after his retirement?
2. What did he do to ensure the success of his fish farming?
3. Why is it important to have enough knowledge of putting his fish farming project?

² Steve Kret, Free Royalty, [https://commons.wikimedia.org/wiki/File:Bangus_harvest_-_panoramio_\(1\).jpg](https://commons.wikimedia.org/wiki/File:Bangus_harvest_-_panoramio_(1).jpg)

³ Bernard Spragg. NZ, Free Royalty, <https://www.flickr.com/photos/volvob12b/18418215776>

⁴ Silver and orange fish on ice, Free Royalty, <https://www.pikrepo.com/fxpma/silver-and-orange-fish-on-ice>

⁵ Ryan Somma, Free Royalty, <https://www.flickr.com/photos/ideonexus/3634418206/>



What is It

In this module, you are going to explore on how to implement plan on fish raising that includes: monitor growth and progress; keep an updated record of growth and progress; and expand/enhance one's knowledge of fish raising using the internet.



Fish raising, as a means of livelihood, is like animal farming in many ways. Fish meat, like animal meat, is rich in protein and is a healthier alternative. Since the Philippines is a country surrounded by bodies of water, many farmers or farming families choose aquaculture over raising animals on land.

Implementing the Plan of the Family's Fish Raising Project

Implementing means putting into action what has been planned. Follow very well what you have planned for changing it in the middle of its operation may cause failure. Successful implementation needs control, suspension, and guidance in the care of the animals. Here are a few things to follow:

1. Be systematic in raising and caring for your fish. Follow your schedule of work including preparation of feeds, time for feeding amount of feeds for each fish, bathing, cleaning of housing and surrounding, recording, immunization, actual weighing, recording of weight, and when to market the fish products and their by-products.
2. Use a chart to record the growth and progress of each fish. Have a specific period of (weekly/monthly) when to record weight. The chart should contain the age of fish, date of weighing, and weight is taken weekly or monthly. To show progress,

⁶ Judgefloro, Free Royalty,
https://commons.wikimedia.org/wiki/File:5848Isla_Babatnin_Malolos_Bulacan_Harvesting_Fishes_School_06.jpg

draw a line from the start of weighing to the current date. This allows you to monitor the progress of each fish.

3. Monitor regularly the growth and progress of fish using the chart.
4. If problems occur regarding the health and progress of animals, consult other experienced fish growers.
5. Surf the internet to gain knowledge of fish raising and be updated on recent studies, researches, and technology about fish raising. Additional knowledge on fish raising can help you improve your practices in animal/fish raising resulting in greater productivity.

Monitoring

There are three important ways to do in the implementation of fish farming: regular monitoring; keeping updated record; and operation planning. With proper monitoring and guidance in the care of animals, you can be systematic and follow your schedule when to apply fertilizer and how much to feed your fish. Above all, you can assess your farm operation if your yields have income or not.

Keeping an Updated Records of Growth/Progress

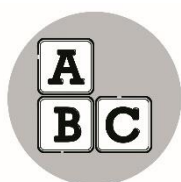
Backyard fish raising is presently becoming a source of family income due to its easy preparation, lesser expenses and a considerable income. Also, fish feeds available in the local market has increased the enthusiasm of farmers in the rural areas. Most importantly, recording every detail of the progress and growth of fish farming must be done at all times.

Sample Chart of the Growth and Progress of a Milkfish

Date of Sampling	Sampling	Weight	Length
11-07-19	Stocking Period		
12-07-19	1 st	0.40 kl	5 inches
01-07-20	2 nd	0.50 kl	7 inches
02-07-20	3 rd	0.80 kl	10 inches
03-07-20	4 th	0.95 kl	12 inches
04-07-20	Harvesting Period		

Expanding/Enhancing one's knowledge on fish raising through internet

The Internet is a good source of free information not only from local but international sources as well. This serves as an avenue to improve knowledge, ideas, and practices in the operation of any fish raising project. There are numerous agricultural websites dedicated to animal raising which aim to spread information to all who are willing to learn. Local and foreign instructional videos can also be accessed through video sharing websites. In the Philippines, there are farming cooperatives and associations willing to share new farming information and technology with those who are willing to learn. The government, through the Department of Agriculture and other government and non-government organizations, is implementing countless programs that aim to assist farmers in every way possible from training to financial, technical, and infrastructure development.



What's More

Independent Activity:

The letters of the words are scrambled. Figure out what the word is and write your answer on a separate sheet of paper.

1. **FHIS FRMAING** _____
2. **KWNOELDGE** _____
3. **MINTOOR** _____
4. **SYTESAMITC** _____
5. **IERNTENT** _____

Independent Assessment:

After you have figure out the scrambled words, it's time for you now to fill in the blanks with the correct answer. Write your answer on a separate sheet of paper.

1. _____ is a form of aquaculture in which fish are raised as a means of livelihood.
2. Surf the internet to gain more _____ of animals raising and be updated of recent studies.

3. _____ regularly the growth and progress of the fish by using the chart.
4. Be _____ in raising and caring for your fish.
5. The _____ is the good source of free information not only from local but international sources of fish farming.



What I Have Learned

- _____ is an important part of the Filipino diet.
- _____ is thinking of what to do. It is mapping out in an orderly and systematic manner the things you are expected to do to ensure success in business.
- _____ means of livelihood, like animal farming. Some farming families choose this because they lived near the bodies of water.
- If problem occurs regarding the health and _____ of the animal/fish, consult other experienced animal/fish growers.
- Surf the internet to gain more _____ knowledge of animal/fish raising and be updated of recent studies, researches, and technology about animal/fish raising.



What I Can Do

How do you apply what you have learned?

Direction: Based on what you have learned on implementing plan on fish culturing/farming, create a chart to record the growth and progress of fish farming in your locality for monitoring.

Below is the checklist that a student like you can do about implementing plan on fish culture/farming. Put a check on the column that corresponds to your answer. Write your answer on a separate sheet of paper.

Implements Plan on Fish Culturing/Farming	Agree	Disagree
1. Successful implementation needs control, suspension, and guidance in the care of the animals/fish.		
2. Additional knowledge on animals/fish farming can help you improve your practices in animals/fish farming resulting in greater productivity.		
3. Surfing the internet does not help in gathering recent findings of studies, researches, and technology about animals/fish farming.		
4. Using a chart can help you record the growth and progress of animals/fish.		
5. Be systematic in raising and caring for your animals/fish.		



Assessment

Multiple Choice. Choose the letter of the best answer then write it on a separate sheet of paper.

1. The following are the benefits in implementing fish farming. Which of the following does not belong?

- a. it is a means of livelihood
- b. it is a waste of time
- c. it instils the spirit of entrepreneurship
- d. it contributes to the economy of the family and the community.

2. Why is it important to monitor the growth and progress of your fish?

- a. to keep an updated record of the fish
- b. to keep your fish plenty
- c. to keep yourself stay in the farm
- d. to keep your fish multiply

3. What material is appropriate to record the growth and progress of your fish?
- a. chart
 - b. diagram
 - c. graph
 - d. thermometer
4. The following statements are ways to implement plan in fish farming, except one.
- a. Be systematic in raising and caring for your fish.
 - b. Consult other farm experts if problems occur regarding the health and progress of your fish.
 - c. Surf the internet and attends seminars to be updated of the recent studies and researches about fish farming.
 - d. Getting information and gathering fake news about fish farming.
5. In fish farming, what fish species grow rapidly? It reproduces all year round and no special kind of feeds.
- a. carp fish
 - b. cat fish
 - c. milk fish
 - d. tilapia
6. Mr. Nobleza wants to have a successful implementation of his fish farming. He wants to widen his knowledge regarding fish farming. What are the things he must follow?
- a. Have control, suspension and guidance in the care of animals/fish.
 - b. Be systematic in raising and caring his animals/fish.
 - c. Ignore the problem that may occur regarding the health and progress of animals/fish
 - d. Monitor regularly the growth and progress of animals/fish using chart.
7. In surfing the internet, what are the things you should consider as a source of information?
- a. Make sure to validate information and check the sources.
 - b. Copy the sources without giving credits to the owner.
 - c. Gathering fake news/information in the internet.
 - d. Getting information from unauthorized websites.

Directions: Study the chart below and answer the questions that follow on a separate sheet of paper.

Chart of the Growth and Progress of Mr. Vasquez Milkfish

Date of Sampling	Sampling	Weight	Length
January 22, 2019	Stocking Period		
February 22, 2019	1 st	.35 kl	4 inches
March 22, 2019	2 nd	.45 kl	6 inches
April 22, 2019	3 rd	.80 kl	9 inches
May 22, 2019	4 th	.95 kl	11 inches
June 22, 2019	5 th	1 kl	12 inches
July 22, 2019	Harvesting Period		

8. How many months does it take for milkfish before harvesting?

- a. 7-10 months
- b. 3-6 months
- c. 8-11 months
- d. 1-3 months

9. In what month of sampling has the milkfish gain the biggest weight?

- a. February 22, 2019
- b. April 22, 2019
- c. March 22, 2019
- d. May 22, 2019

10. What are the different data encode in the chart?

- I. date of sampling
- II. Sampling
- III. Weight
- IV. Length

- a. I and II only
- b. III and IV only
- c. I and IV only
- d. I, II, III and IV



Additional Activities

Interview with a person in your community or nearby community who owns a fish farming/culture project. Ask the assistance of your parent or guardian in doing this activity. Use the chart you have created to record and update his/her record of the project. The checklist below will help you guide if the owner implements his/her plan well. Do this on a separate sheet of paper.

Checklist for Fish Farming/Culturing

Indicators	Regularly	Sometimes	Never
1. Monitors the growth and progress of the project.			
2. Keeps updated record of the growth and progress of the project			
3. Expands/enhances knowledge of fish farming using the internet and other sources of information.			
4. Use chart to record the growth and progress of the fish.			
5. Systematic in caring the fish by following schedule of work including the preparation, time and amount of feeding.			



Answer Key

What I Know 1. internet 2. fish stocks 3. fingerlings 4. monitor 5. investment 6. tilapia 7. enhances knowledge 8. 03-07-20 9. 02-07-20 10. yes	What's More 1. FISH 2. KNOWLE 3. FARMING 4. DGE 5. MONITOR 6. SYSTEMA 7. TIC 8. INTERNET	Assessment 1. B 2. A 3. A 4. D 5. D 6. C 7. A 8. A 9. B 10. D
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References

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The Basics of Better Family Living 6

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