

USER MANUAL

aquaconnect.my

IoT-Driven Water Quality Monitoring

Last Update: 01/01/2025

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- 2. How to Set Up Farm
- 3. View Water Quality
- 4. How to Manage Tank
- 5. View Main Dashboard
- 6. View Analytics
- 7. View Reports
- 8. How to Manage Marketplace
- 9. Account Settings

GETTING STARTED

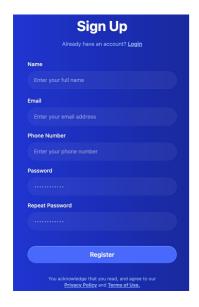
Sign In / Account Registration

A. FOR NEW USER:

1. Go to homepage and click **Register**.



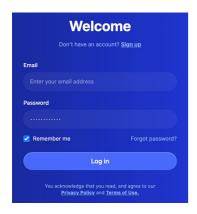
2. Fill in the registration form and click **Register** button.



- 3. After registering, you must wait for admin approval.
- 4. Once approved, you will be able to log in to your account.

B. FOR EXISTING USER:

1. Click **Sign In** button.



- 2. Enter your registered email address and password.
- 3. Click **Sign In** button.

GETTING STARTED

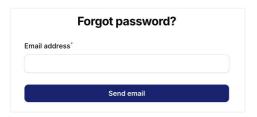
Reset Password

IF YOU FORGOT YOUR PASSWORD AND CAN'T LOGIN:

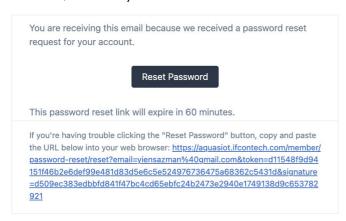
1. Go to Sign In page and click on Forgot Your Password?



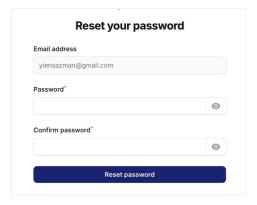
2. Enter your registered email address and click **Send Email** button.



3. Then, check your email inbox. You should receive an email from AQUACONNECT.



4. Click the **Reset Password** button or click the link provided in the email to be redirected to the Reset Password page.



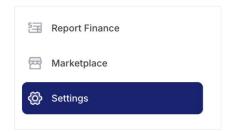
- 5. Enter your new password and confirm (re-enter) new password.
- 6. Click on **Reset Password** button and you can login to your account using the new password.

GETTING STARTED

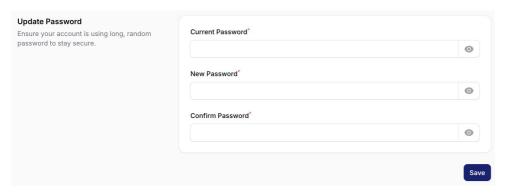
Change Password

TO CHANGE YOUR PASSWORD IF YOU'RE ALREADY LOGGED IN:

- 1. Login to your account.
- 2. From the navigation menu, click on **Settings**.



2. Go to Update Password section.



- 2. Enter your current password first.
- 3. Then, enter new password and confirm (re-enter) new password.
- 4. Once done, click **Save** button to update changes.

1. Getting Started

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- 3. View Water Quality
- 4. How to Manage Tank
- 5. View Main Dashboard
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HOW TO SET UP FARM

Create New Farm

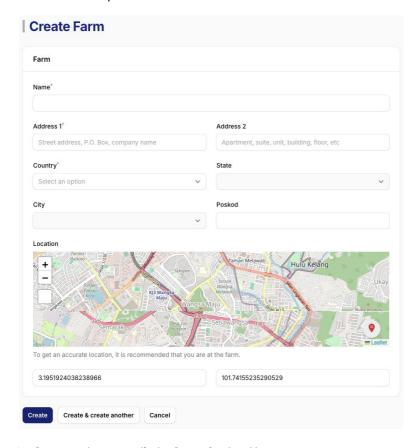
1. From the navigation menu, click on Farm.



2. To add new farm location, click on the Add New Farm button.



- 3. Enter the farm information.
- Farm Name, Farm Address, Pin Farm Location (to get an accurate location, it is recommended that you are at the farm), Longitude & Latitude will auto filled based on the pin location.



4. Once done, click Create button.

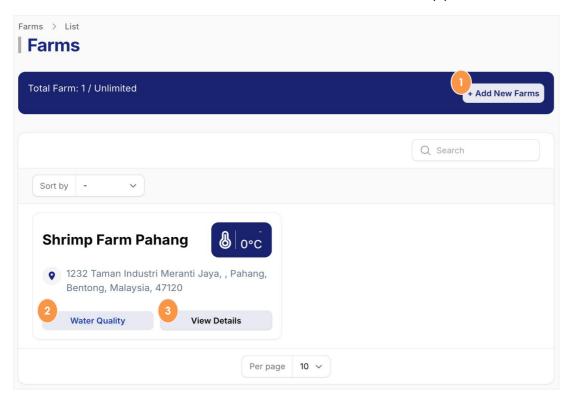
HOW TO SET UP FARM

View Farm List

1. From the navigation menu, click on Farm.



2. A list of farm locations that have been created will appear here.



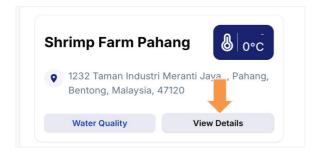
- 3. On this page, the following buttons are available:
- Add New Farm button to add new farm
- Water Quality button to view the history of water quality readings
- View Details button to view farm details

HOW TO SET UP FARM

Edit / Delete Farm

A. TO EDIT FARM:

- 1. From the list of farms, go to farm that you want to edit.
- 2. Click on the View Details button.



3. Click **Edit** button and enter the information that you want to update.



4. Once done, click Save Changes button to update changes.



B. TO DELETE FARM:

- 1. From the list of farms, go to farm that you want to delete.
- 2. Click on the View Details button.



3. Click the **Delete** button and click **Delete Farm** to proceed with the deletion.



- 1. Getting Started
- 2. How to Set Up Farm

3. View Water Quality	\Rightarrow
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- 4. How to Manage Tank
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VIEW WATER QUALITY

Water Quality Log

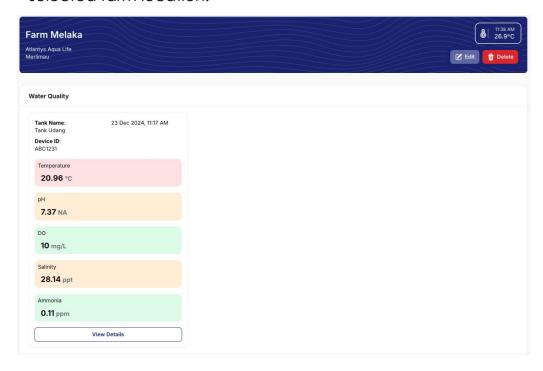
1. From the navigation menu, click on Farm.



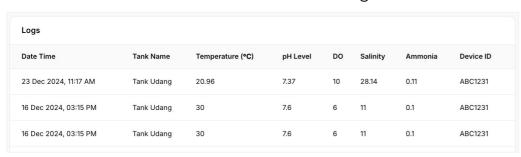
2. From the list of farm locations, click Water Quality.



3. From this page, you can view the latest water quality readings from all tanks at the selected farm location.



4. Click View Details button to view detailed log records.



VIEW WATER QUALITY

Download Water Quality Log

1. From the navigation menu, click on Farm.



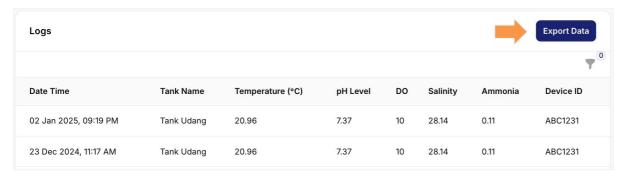
2. From the list of farm locations, click Water Quality.



3. Click the View Details button to view detailed log records.



4. Click the **Export Data** button to download the list of water quality log records.



5. Then, check your email inbox for a message from AQUACONNECT.



6. Go to the **attachment** and download the log file in .xlsx format.

- 1. Getting Started
- 2. How to Set Up Farm
- 3. View Water Quality

4. How to Manage Tank	\rightarrow
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- 5. View Main Dashboard
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View Tank List

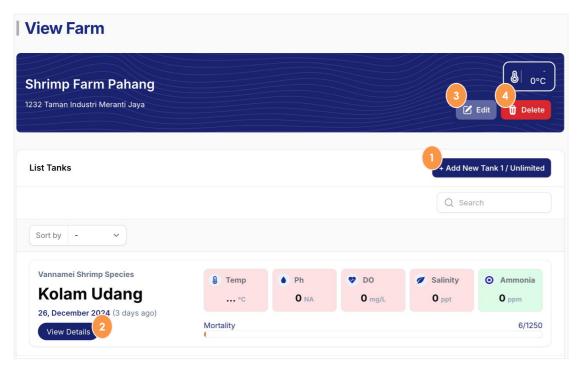
1. From the navigation menu, click on **Farm**.



2. Click View Details button on the farm location.



3. A list of tanks that have been created will appear here, displaying the current water quality readings for each tank.



- 4. On this page, the following buttons are available:
- Add New Tank button to add new tank in the farm.
- View Details button to view tank details
- Edit button to edit farm informations
- Delete button to delete farm

Edit / Delete Tank

A. TO EDIT TANK:

1. From the list of farms, go to the tank's farm location and click View Details button.



2. Then, click View Details button on the tank that you want to update.



3. Click Edit button and enter the information that you want to update.

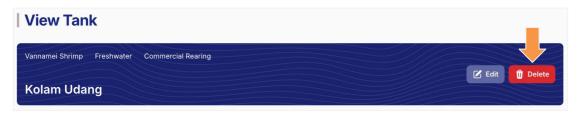


4. Once done, click **Save Changes** button to update changes.



B. TO DELETE TANK:

- 1. From the list of farms, go to the tank's farm location and click **View Details** button.
- 2. Then, click **View Details** button on the tank that you want to delete.



3. Click the **Delete** button and click **Delete Tank** to proceed with the deletion.

Create New Tank

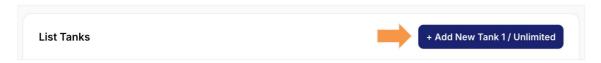
1. From the navigation menu, click on **Farm**. Ensure that a farm location has been created.



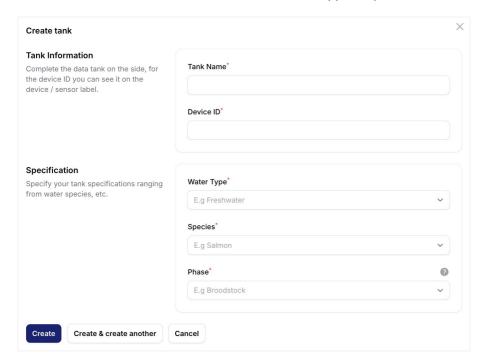
2. Next, go to the tank's farm location and click View Details.



3. To add new tank, click on the Add New Tank button.



- 4. Enter the tank information.
- Tank Name, Device ID, Tank Water Type, Species, Phase.



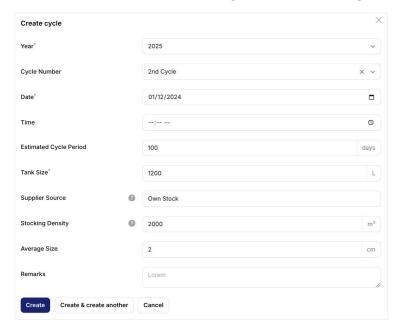
5. Once done, click Create button.

Tank Details > Cycle Lists

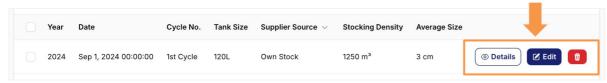
- 1. Go to the tank and click **View Details** button.
- 2. Click **New Cycle** button to create a cycle.



- 3. Enter the cycle information.
- Cycle Year, Cycle Number, Cycle Date & Time, Estimated Cycle Period, Tank Size,
 Supplier Source, Stocking Density, Average Size & Remarks (optional).



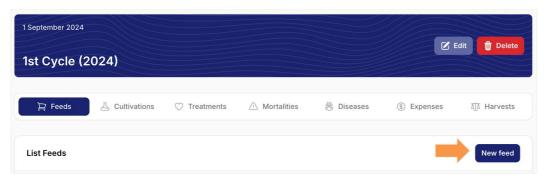
4. Once done, click **Create** button and it will appear in the cycle list.



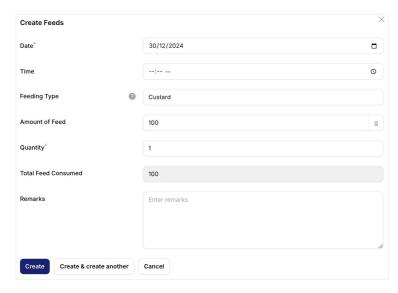
- 5. Button description:
- Details button to view more cycle details (Feeds, Cultivation, Treatments, Mortalities,
 Diseases, Expenses & Harvest)
- Edit button to edit cycle informations
- Delete button to delete cycle

Cycle Details > Feeds Tab

- 1. From the cycle lists, click **Details** button to view more cycle details.
- 2. In the Feed tab, click **New Feed** to add feed informations.



- 3. Enter the feed information.
- Feed Date & Time, Feeding Type, Amount of Feed, Quantity, Total Feed Consumed (auto-calculate), Remarks (optional).



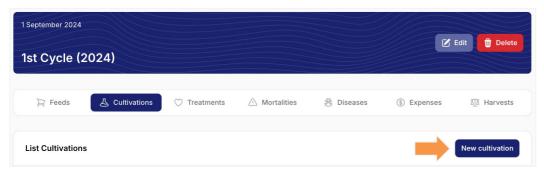
4. Once done, click Create button and it will appear in the feed table.



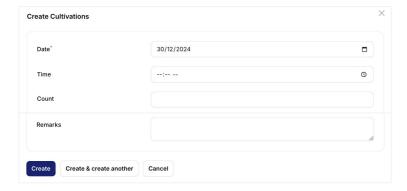
- * DOC will be auto-count from the cycle start date to the date the feed is created.
- 5. Button description:
- Edit button to edit feed informations
- Delete button to delete feed

Cycle Details > Cultivations Tab

- 1. From the cycle lists, click **Details** button to view more cycle details.
- 2. In the Cultivations tab, click **New Cultivation** to add informations.



- 3. Enter the cultivation information.
- Cultivation Date & Time, Count, Feed Conversion Ratio info (auto-calculate), Average
 Daily Gain info (auto-calculate), Average Body Weight info (auto-calculate), Survival
 Rate info (auto-calculate), Remarks (optional).



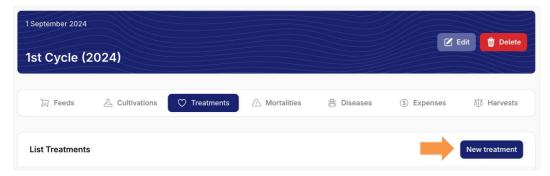
4. Once done, click **Create** button and it will appear in the cultivation table.



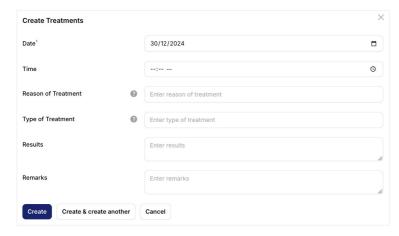
- 5. Button description:
 - Edit button to edit cultivation informations
- Delete button to delete cultivation

Cycle Details > Treatments Tab

- 1. From the cycle lists, click **Details** button to view more cycle details.
- 2. In the Treatments tab, click **New Treatment** to add informations.



- 3. Enter the treatment information.
- Treatment Date & Time, Reason of Treatment, Type of Treatment, Results, Remarks (optional).



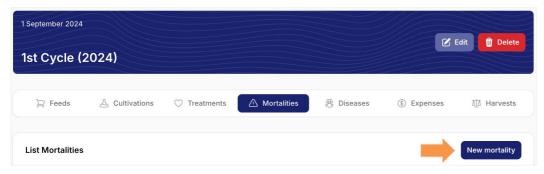
4. Once done, click Create button and it will appear in the treatment table.



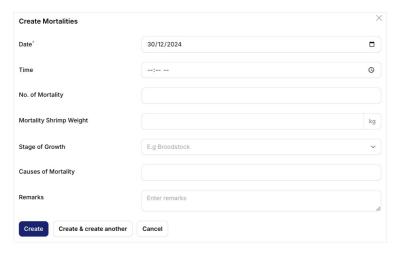
- 5. Button description:
- Edit button to edit treatment informations
- Delete button to delete treatment

Cycle Details > Mortalities Tab

- 1. From the cycle lists, click **Details** button to view more cycle details.
- 2. In the Mortalities tab, click **New Mortalities** to add informations.



- 3. Enter the mortality information.
- Mortality Date & Time, No. of Mortality, Mortality Shrimp Weight, Stage of Growth, Causes
 of Mortality, Remarks (optional).



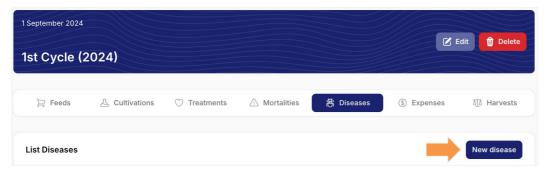
4. Once done, click **Create** button and it will appear in the mortalities table.



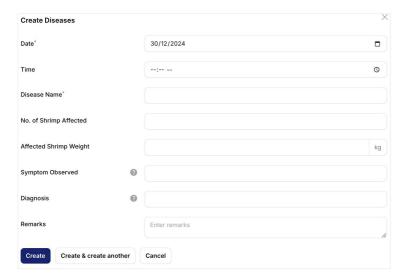
- 5. Button description:
- Edit button to edit mortality informations
- Delete button to delete mortality

Cycle Details > Diseases Tab

- 1. From the cycle lists, click **Details** button to view more cycle details.
- 2. In the Diseases tab, click **New Disease** to add informations.



- 3. Enter the disease information.
- Disease Date & Time, Disease Name, No. of Shrimp Affected, Affected Shrimp Weight,
 Symptom Observed, Diagnosis, Remarks (optional).



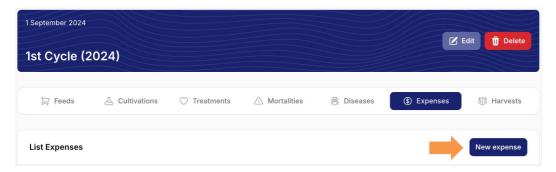
4. Once done, click Create button and it will appear in the diseases table.



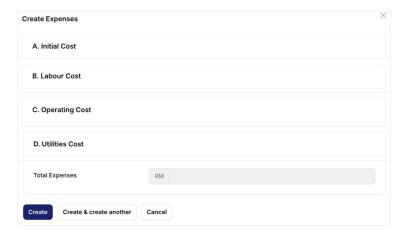
- 5. Button description:
- Edit button to edit disease informations
- Delete button to delete disease

Cycle Details > Expenses Tab

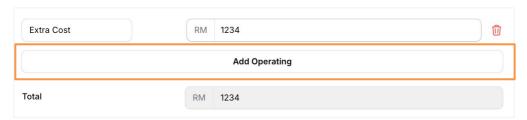
- 1. From the cycle lists, click **Details** button to view more cycle details.
- 2. In the Expenses tab, click **New Expenses** to add informations.



- 3. Enter the expenses information.
- Initial Cost, Labour Cost, Operating Cost, Utilities Cost, Total (all auto-calculate).



4. You can add additional cost by clicking Add button in Operating & Utilities Cost.



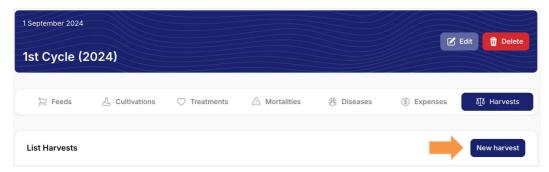
5. Once done, click Create button and it will appear in the expenses table.



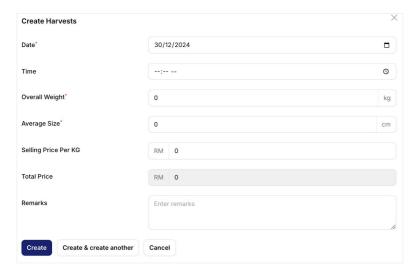
- 6. Button description:
 - Edit button to edit expenses informations
- Delete button to delete expenses

Cycle Details > Harvests Tab

- 1. From the cycle lists, click **Details** button to view more cycle details.
- 2. In the Harvests tab, click **New Harvests** to add informations.



- 3. Enter the harvest information.
- Harvest Date & Time, Overall Weight, Average Size, Selling Price Per KG, Total Price, Remarks (optional).



4. Once done, click Create button and it will appear in the harvests table.



- 5. Button description:
- Edit button to edit harvest informations
- Delete button to delete harvest

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- 4. How to Manage Tank

5. View Main Dashboard



Main Dashboard by Section

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- 6. View Analytics
- 7. View Reports
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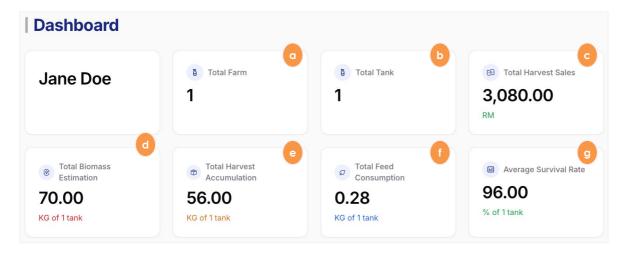
VIEW MAIN DASHBOARD

Main Dashboard - 1st Section

1. From the navigation menu, click on **Dashboard**.



2. From this first section, you will be able to view:

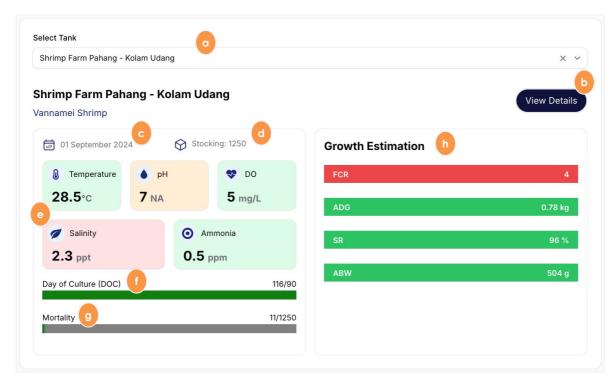


- a. Total farm that has been created.
- b. Total tank that has been created.
- c. Total sum of harvest sales from all tank.
- d. Total sum of biomass estimation from all tank.
- e. Total sum of harvest accumulation from all tank.
- f. Total sum of feed consumption from all tank.
- g. Average survival rate from all tank.

VIEW MAIN DASHBOARD

Main Dashboard - 2nd Section

3. In this section, you can filter the tank summary based on the latest cycle:

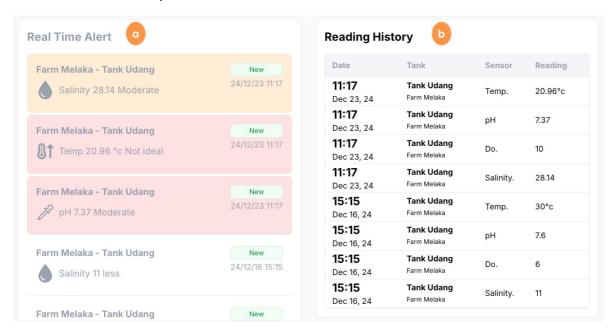


- a. Select tank to filter.
- b. Button to view tank details.
- c. Cycle start date.
- d. Stocking density.
- e. Latest water quality reading.
- f. Total cycle day/ Estimated cycle day.
- g. Total mortality/ Stocking density.
- h. FCR, ADG, SR, ABW taken from cultivation tab in cycle details.

VIEW MAIN DASHBOARD

Main Dashboard - 3rd Section

4. In this section, you can:



- a. View real-time alerts from the latest water quality readings.
- b. Water quality reading history, sorted by the most recent readings.

Water Quality Color Range

Green	Good water quality value
Yellow	Moderate water quality value
Red	Not good water quality value

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6. View Analytics



Analytics by Section

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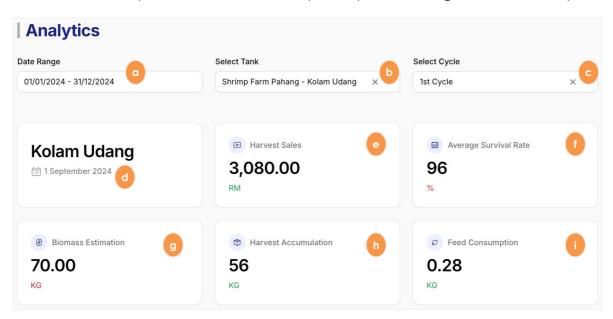
VIEW ANALYTICS

Analytics - 1st Section

1. From the navigation menu, click on **Analytics**.



2. In this section, you can filter the analytics by Date Range, Tank, and Cycle.



- a. Filter by date range.
- b. Filter by tank.
- c. Filter by cycle in the tank.
- d. Cycle start date.
- e. Total harvest sales.
- f. Average survival rate.
- g. Total biomass estimation.
- h. Total harvest accumulation.
- i. Total feed consumption.

VIEW ANALYTICS

Analytics - 2nd Section

3. In this section, you can view analytics based on the filtered Date Range, Tank, and Cycle.



- a. A summary chart of water quality.
- b. A chart displaying cultivation data.

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7. View Reports	$\overline{\Rightarrow}$
Report Cultivation	33-35
Report Finance	36-37

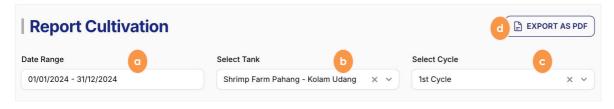
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Report Cultivation 1/3

1. From the navigation menu, click on Report Cultivation.



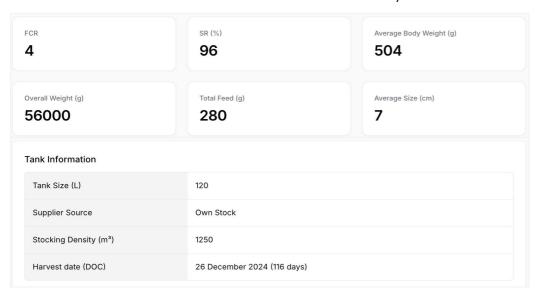
2. In this section, you can filter the report by Date Range, Tank, and Cycle.



- a. Filter by date range.
- b. Filter by tank.
- c. Filter by cycle in the tank.
- d. Button to export report in PDF.

A. INFO TAB:

1. Info tab contains the tank information & summary data.

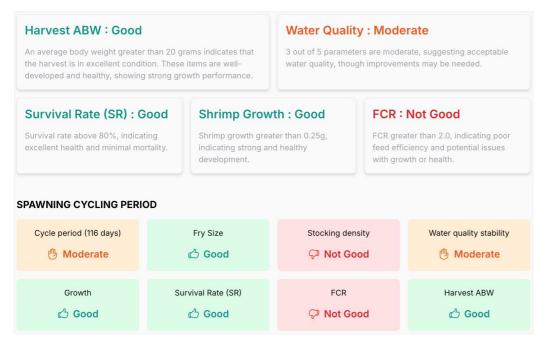


- a. FCR, SR, ABW (from Cultivation tab)
- b. Overall Weight (from Harvest tab)
- c. Total Feed (from Feed tab)
- d. Average Size (from Harvest tab)

Report Cultivation 2/3

B. SUMMARY TAB:

1. Summary tab contains summary data in cycle details.

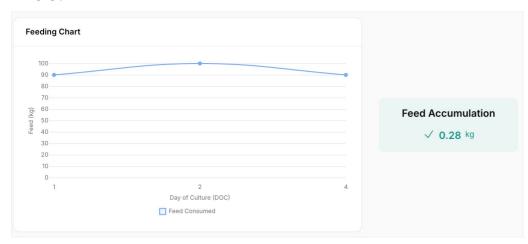


- a. Harvest ABW (from Cultivation tab)
- b. Water Quality
- c. Survival Rate (from Cultivation tab)
- d. Shrimp Growth (from ADG in Cultivation tab)
- e. FCR (from Cultivation tab)
- f. Cycle Period (from start cycle until harvest date)
- g. Fry Size (from Cycle Info)
- h. Stocking Density (from Cycle Info)

Report Cultivation 3/3

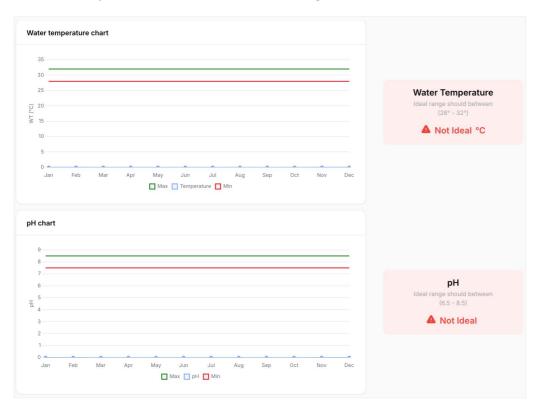
C. FEEDING TAB:

1. Feeding tab displays the total feed consumption and a chart showing the feed amount by DOC.



D. WATER QUALITY TAB:

1. Water quality tab presents a chart of water quality readings (Temperature, pH, DO, Salinity, Ammonia) based on filtered date range.

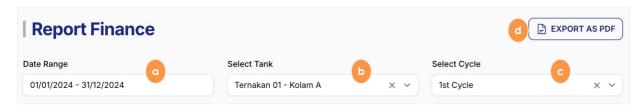


Report Finance 1/2

1. From the navigation menu, click on **Report Finance**.



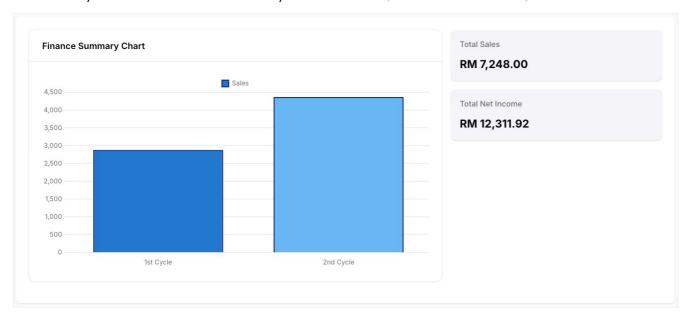
2. In this section, you can filter the report by Date Range, Tank, and Cycle.



- a. Filter by date range.
- b. Filter by tank.
- c. Filter by cycle in the tank.
- d. Button to export report in PDF.

A. SUMMARY TAB:

1. Summary tab contains a summary of total sales, total net income, and a sales chart.



^{*} Please do not filter by cycle if you want to view the summary for all cycles.

Report Finance 2/2

B. REPORT TAB:

1. Report tab contains data on sales, expenses, and losses for filtered cycle.

	Item	Pricing ((RM)	Quantity	Cost (RM)
		SALES			
Α	Adult, Vannamei Shrimp		55	56	3,080.00
	Sub Total A				3,080.00
		EXPENSES			
В	Live/brood stock modal				5.00
	Sub Total B				5.00
С	Workers				100.00
C	Sub Total C				100.00
	Transportation				40.00
	Total feed spend				100.00
	Treatment Cost				0.00
D	Maintenance Cost				40.00
	Miscellaneous Cost				120.00
	Water				20.00
	Sub Total D				320.00
	Electricity Usage				90.00
_	Water Usage				30.00
E	Network				30.00
	Sub Total E				150.00
		LOSS			
	Mortality		55	0.11	6.05
F	Disease		55	0.02	1.10
	Sub Total F				7.15
		TOTAL			
Net Op	erating Income (A - (D + E))				2,610.00
Total C	ost: Fixed Operating (B + C + D + E)				575.00
Net Inc	ome (A - B - C - D - F)				2,647.85

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9. Account Settings

HOW TO MANAGE MARKETPLACE

Create New Marketplace

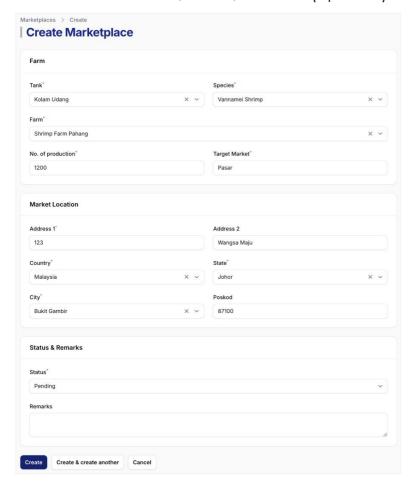
1. From the navigation menu, click on Marketplace.



2. To add new marketplace, click on the **New Marketplace** button.



- 3. Enter the marketplace information.
- Select Tank, Select Species, Select Farm, No. of Production, Target Market, Market Location Address, Status, Remarks (optional).



4. Once done, click Create button.

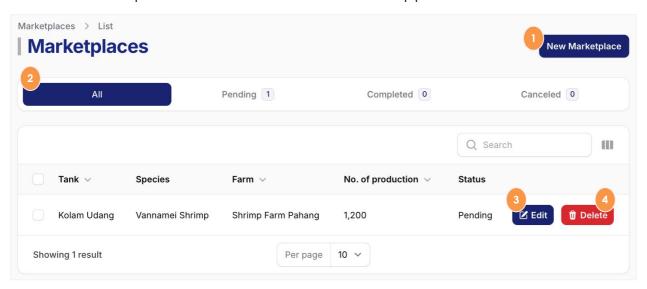
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View Marketplace List

1. From the navigation menu, click on Marketplace.



2. A list of marketplace that has been created will appear here.



- 3. This page contains several tabs/buttons, including:
- Add New Marketplace button to add new data
- 4 Status tab tab to categorize marketplaces by their status
- Edit button to update data
- Delete button to delete data

- 1. Getting Started
- 2. How to Set Up Farm
- 3. View Water Quality
- 4. How to Manage Tank
- 5. View Main Dashboard
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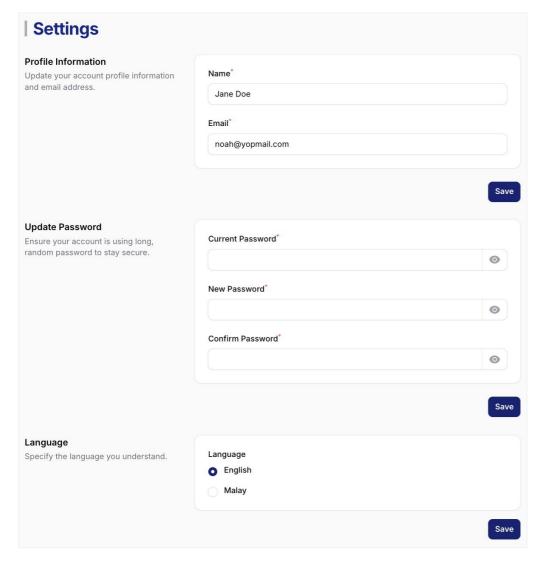
ACCOUNT SETTINGS

Update Account Info

1. From the navigation menu, click on **Settings**.



- 2. From this page, you can update the following 3 information:
- Profile Information (Name & Email)
- Update Password
- Change Language (English or Malay)



3. Click **Save** button to update changes.