# AQUATRAC

To Monitor the Aqua culture

#### **User Profile**

- User Name
- User Email
- Phone (verification needed)
- Address
- City
- State
- Country
- Postal Code
- Website
- Logo

# Farm (default screen to this farm)

- Farm Name
- **Established** Year
- **Address**
- City
- State
- Postal Code
- Country
- **GPS Location**

#### **Pond / Tank Details**

- Tank Name
- ID (Alpha numeric 3digit Alphabet)
- Type (Biofloc Round Tank, BioFloc Rectangular, Pond without liner, Pond with liner)
- Diameter m / Length x breadth
- Height m
- Water Volume litre
- Effective Volume litre
- Material (PVC, Geomembrane)
- Tank Setup Year
- Tank Setup Cost /tank
- Tank Preparation Days

# **Measuring Parameters with range**

- Temperature (Temp) | Range 24 to 32 degree c
- Dissolved Oxygen (DO)
- **Total Dissolved Solids (TDS)**
- рH
- **Floc**
- **Ammonia**
- **Nitrite**
- **Nitrate**
- TAN
- Salinity
- **Alkalinity**

# **Seed Supplier Details**

- Seed Supplier Name
- Address
- City, State, Country, Postal Code
- Phone
- **Email**
- Date of Registration
- Item Supplied (Multi select Tilapia, Mono Sex Tilapia, GIFT, Rohu, RoopChand etc)
- Status Active / Inactive

## Fish Details

- Fish Name
- Stock Density = number / litre
  - **Biofloc Round**
  - **Biofloc Rectangle**
  - Pond without liner
  - **Pond with Liner**
- Harvest Period in months
- Harvest weight grams
- Harvest Length cm

# **Buyer Info**

- **Buyer Name**
- **Address**
- City, State, Country, Postal Code
- Phone, Email, Date of Registration
- Status Active / Inactive

Display purchase transaction / date

#### **Operating Expenses**

- Farm Name
- Number of Staff
- Total Salary /month
- Power /month
- Water /month
- Land Value -(Own Market value, Lease Cost, Rent per month)
- Lab Equipment Cost
- Chemicals Stock details ......

# **Feed Supplier Details**

- Feed Supplier Name
- Address
- City, State, Country, Postal Code
- Phone, Email
- Date of Registration
- **Brand Name**
- Item Supplied (Multi select Feed, Medicine)
- Status Active / Inactive

#### Membership

- Free
- Bronze
- Silver
- Gold
- Payment History

#### **User Role**

- Owner
- Admin
- Operation

Lab Assistant

View Only

#### **Feed Purchase**

- Feed Supplier Name
- Feed Batch ID (1<sup>st</sup> 3 alphabet of brand with 4 auto numbering)
- Date Arrived
- Feed size
- Protein %
- Feed Purchase Quantity kg
- Feed Price per Kg
- Feed Quantity available as of now

#### **Seed Purchase**

- Seed Supplier Name
- Seed Batch ID (S -1<sup>st</sup> 3 alphabet of brand with 4 auto numbering)
- Fish Name
- Date Arrived
- Seed Quantity
- Seed size inch
- Seed Price per piece

# **Harvest Cycle**

- Tank ID
- Start Date
- Harvest ID (Tank ID and start date)
- Target Harvest Date
- Fish Name
- Seed Supplier Name
- Seed Quantity
- Seed Average weight
- Seed Length

# Feed (daily)

- Tank ID
- Harvest ID (Display)
- Number of session (follow previous day) max 4
- Session (1,2,3,4)
- Date
- Time
- Feed Batch ID
- Feed Size
- Proposed quantity (display) divided by above session
- Previous day session (display)= divided by above session)
- Feed quantity kg (2 digit)
- Total quantity per day Kg (display)
- Fasting (check box)

Note: Show all the Tank info in the bottom with Feed info in the grid which are completed for that day

#### Disease (random)

- Tank ID
- Harvest ID (Display)
- Date
- Disease
- Note

Note: Show all the Tank info in the bottom with past disease info in the grid

#### Measurement (daily)

- Tank ID
- Harvest ID (Display)
- Date
- Time
- Temperature
- Dissolved Oxygen (DO)
- Total Dissolved Solids (TDS)
- pH
- Floc
- Ammonia
- Nitrite
- Nitrate
- TAN
- Salinity
- Alkalinity

Note: Show all the Tank info in the bottom with measurement info in the grid which are completed for that day

#### **Treatment (as needed)**

- Tank ID
- Harvest ID (Display)
- Date
- Treatment Type (Carbon Source, Bio activator, Medicine)
- Note

Note: Show all the Tank info in the bottom with past treatment info in the grid

# **Growth (weekly)**

- Tank ID
- Harvest ID (Display)
- Date
- Total number of fish
- Total Weight grams
- Average Weight / piece (auto calculate)
- Random Length cm

Note: Show all the Tank info in the bottom with growth info in the grid which are completed for other Tanks

# Mortality (as needed)

- Tank ID
- Harvest ID (Display)
- Date
- Number of fish
- Total Weight

Note: Show all the Tank info in the bottom with past disease info

#### Harvest (as needed)

- Tank ID
- Harvest ID (Display)
- Date
- Total Weight
- Buyer Name

Note: Show all the Tank info in the bottom with past disease info

#### **Dash Board**

#### **Growth (for individual tank)**

- Display the Fish Name for a tank
- X axis days and months
- Y Axis grams

Criteria – Tank ID, Harvest ID (show recent as default. They can change harvest ID to display History)

# Feed Conversion Ratio (for individual tank)

- Display the Fish Name for a tank
- X axis week and months
- Y Axis Ratio

Criteria – Tank ID, Harvest ID (show recent as default. They can change harvest ID to display History)
Ratio is calculated by cumulating feed weight /actual fish weight on that day

# C:N Ratio (for individual tank)

- Display the Fish Name for a tank
- X axis day and months
- Y Axis Ratio
- Z axis Protein percentage

Criteria – Tank ID, Harvest ID (show recent as default. They can change harvest ID to display History)

# **Overall Health (for individual tank)**

- Display the Fish Name for a tank
- X axis day and months
- Y Axis display only the day which spotted deviation against measurement with different colour code of different measurement

Criteria – Tank ID, Harvest ID (show recent as default. They can change harvest ID to display History)

# **Health (for each measurement)**

- Display the Fish Name for a tank
- X axis day and months
- Y Axis display each measurement with different colour code

Criteria – Tank ID, Harvest ID (show recent as default. They can change harvest ID to display History)



