AQUA HARVEST

PROMOTING SUSTAINABLE FISH FARM CULTIVATION





Team Ryzen Sharks

OUR TEAM

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THE PROBLEM

THE CURRENT CULTIVATION METHODS TAKES TIME AND IS PRONE TO TRIAL AND ERROR DURING THE INITIAL DAYS

NEED TO MANUALLY GO AND CHECK EVERY OFTEN TO ENSURE THAT THE FISHES ARE IN GOOD HEALTH

TBEGINENERS DON'T KNOW OF PROPER GOOD RESOURCES TO ACTUALLY START THE CULTIVATION

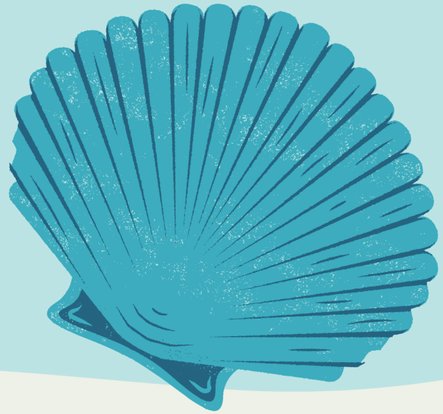
ONCE THE FISHES ARE IN GOOD HEALTH, THE SELLER DON'T KNOW HOW EXACTLY TO MARKET THEM TO POTENTIAL CUSTOMERS

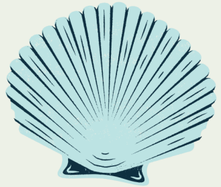


OUR SOLUTION

- Create a platform for a new individuals to start fish farm cultivation from scratch and earn a livelihood selling fish produce and also for existing farms to simplify their daily work.
- After the fish is harvested, we provide a marketplace for selling the fish
- The platform will have both farmer and customer side, primarily focussed on the farmer side.

FEATURES





CURATED RESOURCES

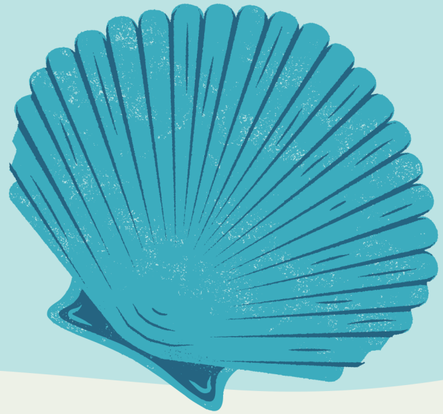
For people who don't have prior experience in fish farming can use this feature to learn and setup their fish farming setup

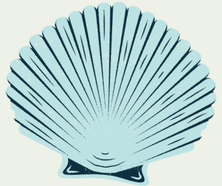
SENSORS FOR MONITORING WATER

Sensors for monitoring ph, temperature, ammonia etc are placed in the tank and alert are send if values crosses dangerous levels



FEATURES





SUGGESTIONS ON WHICH FISHES TO CULTIVATE

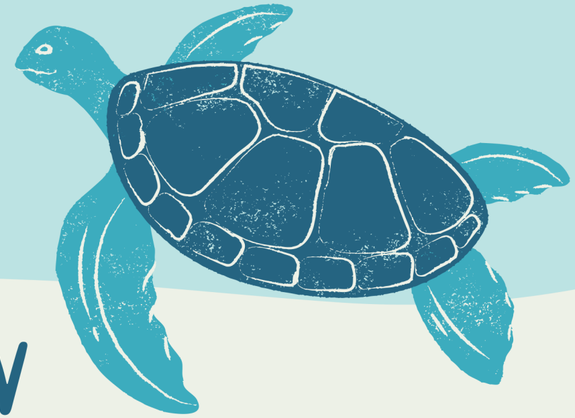
SWhen the fisherman starts a new cycle of harvest, we show them suggestions based on regional popularity, compatibility etc

PROGRESS BAR TO TRACK FISH LIFECYCLE

The important milestones and time needed for it to be harvested are displayed for each fish



FEATURES



INFORM ABOUT APPLICABLE SUBSIDIES

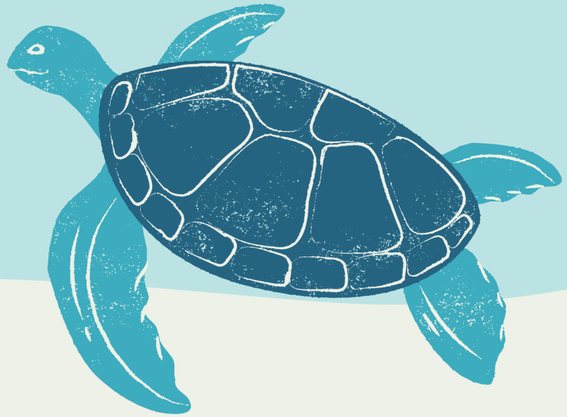
A lot of subsidies are provided by the government which are not known to many. We'll be giving them details about applicable ones.

TODOS BASED ON TANK REQUIREMENTS

Remind them about important activities to be done on the tank.



FEATURES



MARKET PLACE TO LIST THE HARVEST

A fish marketplace to sell to regional buyers



TARGET AUDIENCE

- People who wanna start fish farming
- People with established farms but wanna simplify the work
- People who want fresh fish

REVENUE MODEL



- Can add max 2 tanks in free version
- Can connect max 3 sensors under free version in each tank. (Cost of sensor born by seller).
- Can provide transportation via marketplace under paid plan

FUTURE PLANS

- Implement daily food calculations and automated food dispersal
- Premium features
- Adding more sensor data

REFERENCE:

- The ranges for readings of ph and temperature are reffered from https://www.researchgate.net/publication/334091423_IoT_Based_Automated_Fish_Farm_Aquaculture_Monitoring_System
- The range for ammonia readings are reffered from https://sciforum.net/paper/download/8044/manuscript
- The harvest cycle for fishes are reffered from https://thefishsite.com/articles/cultured-aquatic-species-mrigal-carp
- https://thefishsite.com/articles/cultured-aquatic-species-catla-catla
- https://nfdb.gov.in/PDF/E%20Publications/12%20Package%20of%20Practices_Breeding%20&%20Culture_Freshwater%20Fish%20Species_October2018.pdf
- The recommended manuring details are from https://farmer.gov.in/imagedefault/handbooks/BooKLet/NAGALAND/20170517165644_fish%20pond.pdf
- The Subsidy that can be availed is referred from https://dahd.nic.in/related-links/centrally-sponsored-schem development-inland-fisheries-and-aquaculture
- Popular fish to be grown in a particular obtained by webscraping https://www.freshtohome.com/