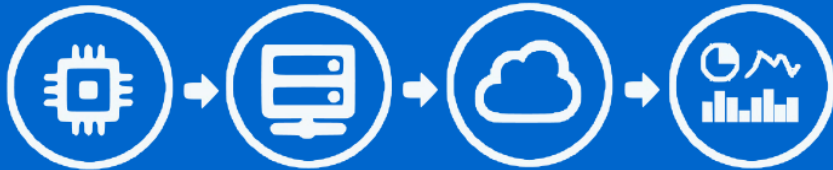


# Tech4Impact

“An Initiative for Sustainable INDIA”



# Frugal Labs & Tech4Impact



Frugal Labs is a Technology Company providing sustainable IoT Business solutions for B2B Customers mainly in the field of Agriculture and allied Services, Industrial Automation, and Smart Cities.

Tech4Impact is an initiative by Frugal labs to design, develop and use IoT and related technologies to come out with solutions to create greater community impact.

The initiative focuses on Small and Medium scale Farmers of Agri & Agro-Allied Sectors (Dairy, Pisciculture and animal husbandry) to create larger impact in their Businesses by using IoT Technology & its applications.

# The Idea(Tech4Impact)



## Why?

- Low adoption of IoT as a Technology in India in Agri and Agro-allied sectors.
- Small average size of farms/No of Cattles/Size of Ponds.
- Lack of exposure and capital.

## What?

- To work with the communities of small Farmers
- Providing them the exposure of using IoT as a technology to increase their productivity.

## How?

- We are making customised solutions to suit the needs of Small scale farmers.
- Working on sustainable financial model to achieve high adoption.

# The Data



Small and marginal farmers with less than two hectares of land account for 86.2% of all farmers in India, but own just 47.3% of the crop area, according to provisional numbers from the 10th agriculture census 2015-16

India ranks first among the world's milk producing Nations since 1998 and has the largest bovine population in the World. Milk production in India during the period 1950-51 to 2017-18, has increased from 17 million tonnes to 176.4 million tonnes as compared to 165.4 million tonnes during 2016-17 recording a growth of 6.65 %. FAO reported 1.46% increase in world milk Production from 800.2 million tonnes in 2016 to 811.9(Estim) million tonnes in 2017.

The total fish production during 2017-18 is estimated to be 12.60 million metric tonnes, of which nearly 65% is from inland sector and about 50% of the total production is from culture fisheries, and constitutes about 6.3% of the global fish production.

# The Applications(Methods)



## ✓ Precision Farming

- ✓ Weather Monitoring
- ✓ Soil Quality Monitoring (ph, moisture, temp & humidity)
- ✓ Alert Systems For Farmers

## Fish Farm Management

- ✓ Water Quality through water ph, DO(Dissolve O2),temp, TDS & EC.
- ✓ Aerator Control

## Cattle Monitoring

- ✓ Cow Health Monitoring
- ✓ Body Temp Measurement (Heat Detection)
- ✓ Unusual Behaviour detection
- ✓ Signs Of Disease prediction.

# The Impact



## Social

- Community Development
- Awareness Programs on Policies, Programs, Plans, & Projects

## Environmental

- Efficient Use of Water Resources
- Reduction of chemical use in Agri and Agro Allied Sectors
- Prevent soil degradation in cultivable land

## Economic

- Right combination of Farmers Wisdom & CDSS(Computerized Decision Support System) increases productivity and in return revenue
- Dissemination of modern farm practises to improve quality, quantity and helps to reduce cost of production
- Farming as Entrepreneurship
- Rural Youth Employment



# The Stakeholders



Technology  
Frugal Labs

## Ecosystem –

- NGOs,
- Individual Consultants,
- Development Organizations

## Research -

- Universities
- KVKs
- Specific Institutions

## Funds

- Financial Institutions
- Grants
- Innovation Funds
- NGO Funding



# Thank You



Email to- [info@frugal-labs.com](mailto:info@frugal-labs.com)  
Or Log On to [www.frugal-labs.com](http://www.frugal-labs.com)