Innovating to Drive
Farmer Livelihood

33%
food supply
600M
smallholder farmers
>5
acres
Food and Agriculture Organization of the United Nations

33% food supply =

African Male Elephants
(avg weight 14,000 lbs.)

total weight of 510K African Male Elephants

600M

smallholder farmers

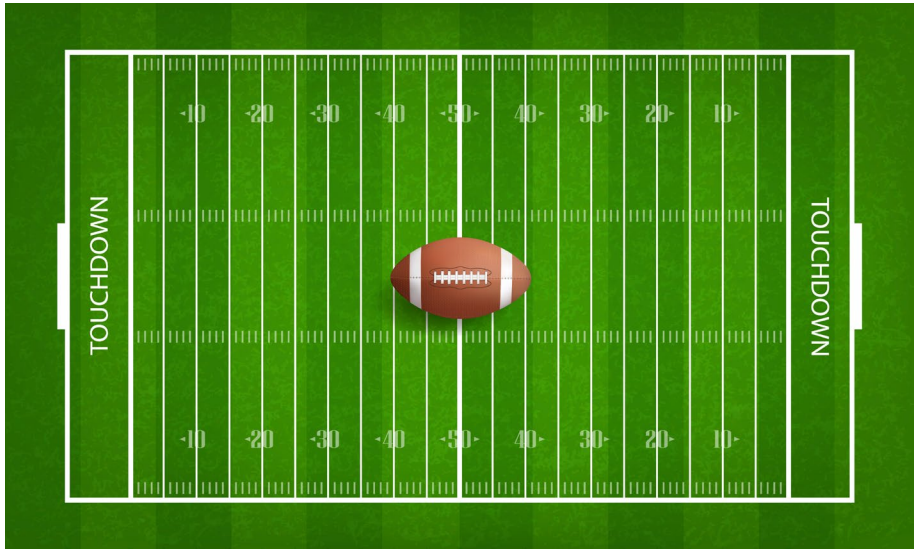
=

U.S. Population
334 Million

1.8x

U.S. Population

>5 acres =



U.S. Football Fields

1.32 acres

3.5

U.S. Football Fields

Cargill® Helping the world *thrive*

Nourish the world in a safe, responsible and sustainable way.

Over 150,000 employees

Working in over 70 countries

More than 158 years of experience

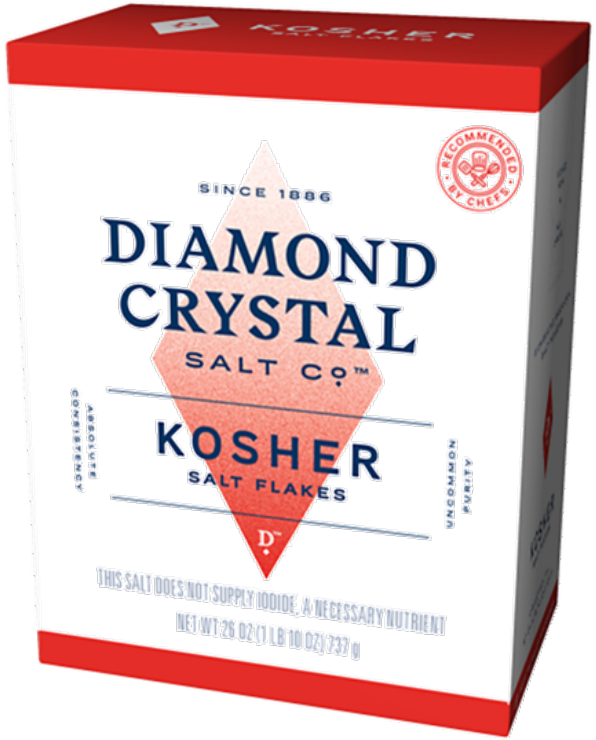
A trusted partner for food, agriculture, financial and industrial customers in more than 125 countries.

Agriculture

Food

Animal nutrition & protein

Financial & industrial

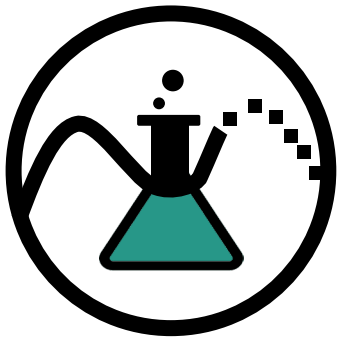


Cargill®
Helping
the world
thrive

Cargill & IBM: Farmer Livelihood

- 1957 installed its first electronic digital computer, IBM 650
- Analyzed more than 4 million possible outcomes
- Precisely formulate a breakthrough product: Nutrena All-Mash Egg Feed
- Helped farmers raise healthier, larger and more productive chickens at a lower cost
- First formulation completely calculated by the computer— an industry turning point

Cargill® Helping the world *thrive*



DIGITAL LABS

Preparing Cargill for a digital future.

iQuatic

Digital Saathi

Cargill's Innovation Approach

How to explore the customer problem

How to develop & test a solution

How to build & scale the solution

1.254
0.682
1.527
1.950
0.112
0.328
1.044
0.982
0.427

Precision Agriculture
Access to Knowledge and Education
Digital Marketplaces and Direct Trade
Financial Inclusion and Access to Credit
Collaboration and Knowledge Sharing

Shrimp Farmer Livelihood in Ecuador

Ecuadorian Shrimp Farming

- Shrimp farms comprise 220,00 hectares
- 2nd largest generator of non-oil export earnings
- Employs over 340,000 people, many in poor, rural areas
- Women make up 33% of the workforce

Explore Customer Problems

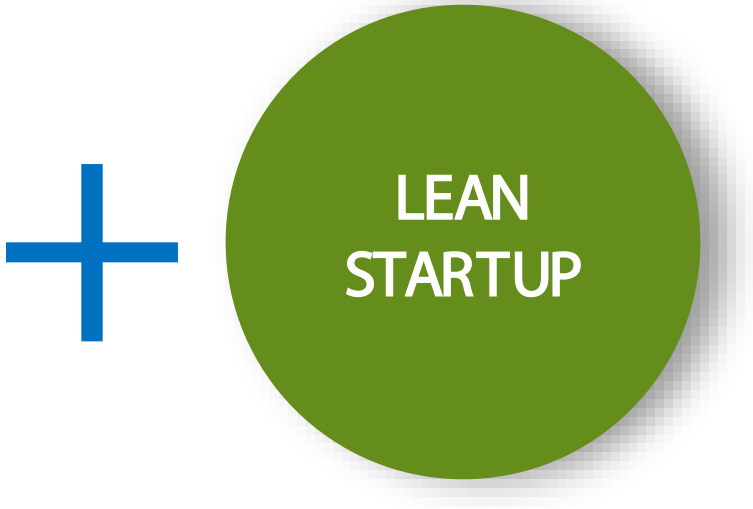
DESIGN THINKING

Conversations and interviews to understand shrimp farmer problems

Shrimp Farmer Problems

- Weather
- Poor Productivity
- Low Feed Conversion Rate
- Diseases
- Unpredictable Yields
- Resource-intensive Farming

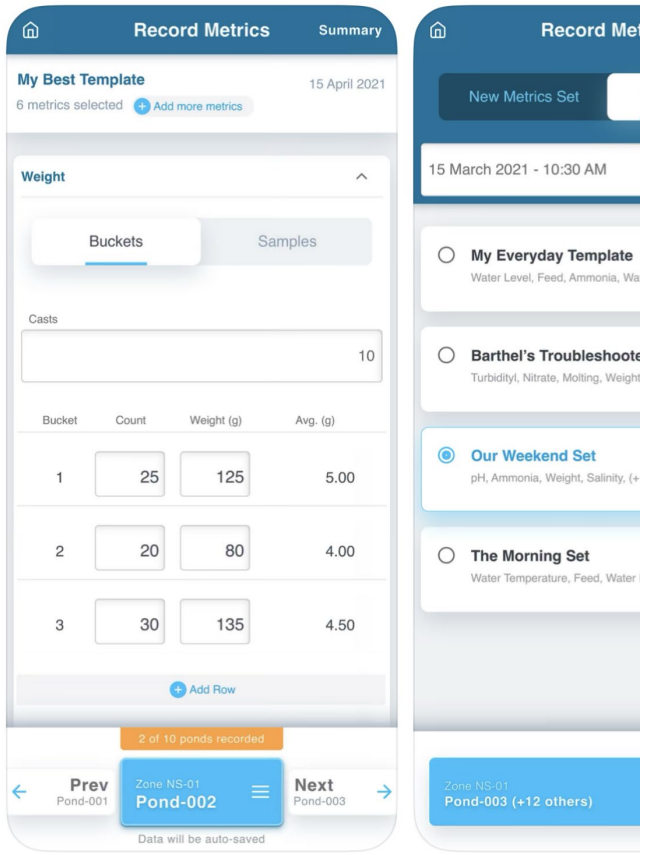
Test Minimal Usable Demo (MUD)



Minimal Useable Demo (MUD)

MEASURE: Form Entries/Day (usage)

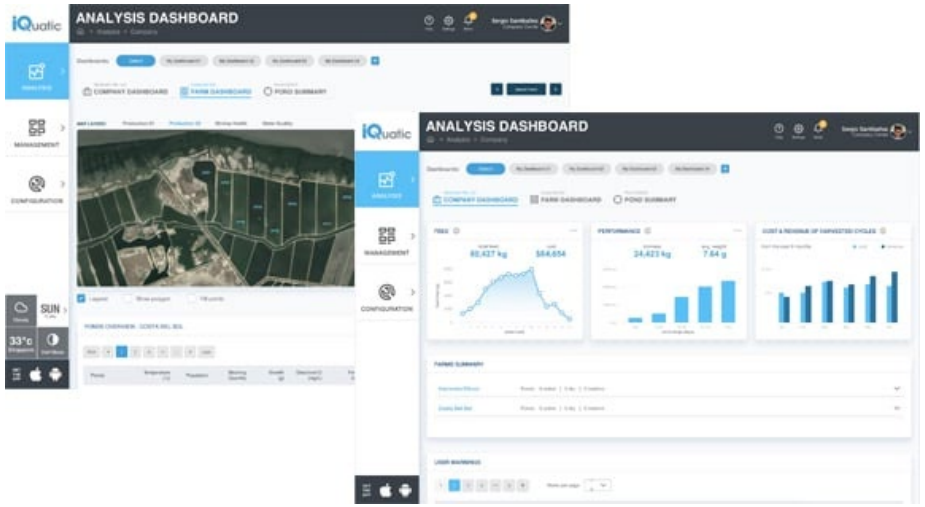
Launch and test with select shrimp farmers



iQuatic Build & Scale

+

AGILE
DEV

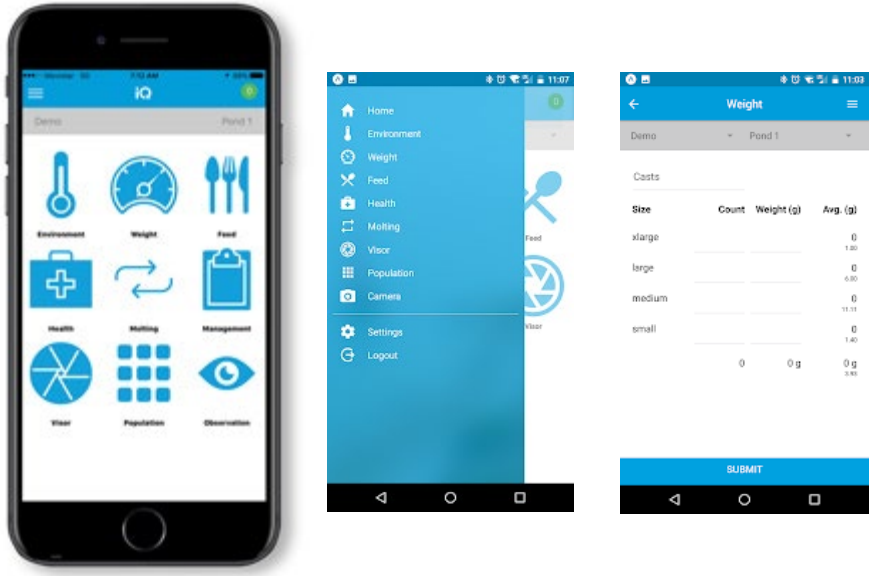


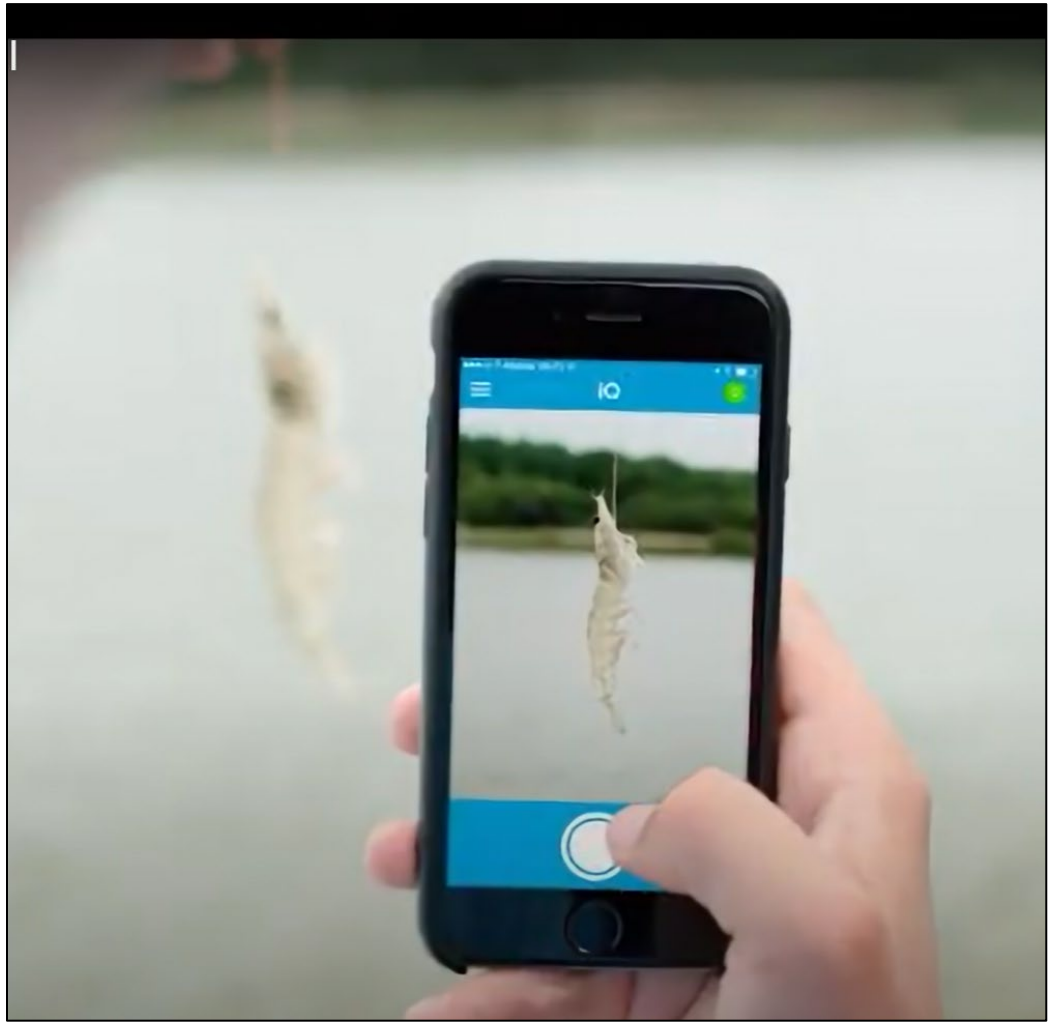
Expanded to all Ecuadorian shrimp farmers AND then Asia

iQShrimp, driven by iQuatic™

Cargill's digital platform for aquaculture

iQuatic Success Story





iQuatic – AgTech Check List

- ✓ Precision Agriculture
- ✓ Access to Knowledge and Education

  Digital Marketplaces and Direct Trade

  Financial Inclusion and Access to Credit

  Collaboration and Knowledge Sharing

Crop Farmer Livelihood in India

Indian Agriculture

- 17% of GDP is agriculture
- Employs 60% of nation's workforce
- 70% rural households depend on agriculture for livelihood
- 82% farmers are small and marginal
- Cereal-centric (grains)
- Traditional farming practices, are unsustainable

Explore Customer Problems

DESIGN THINKING

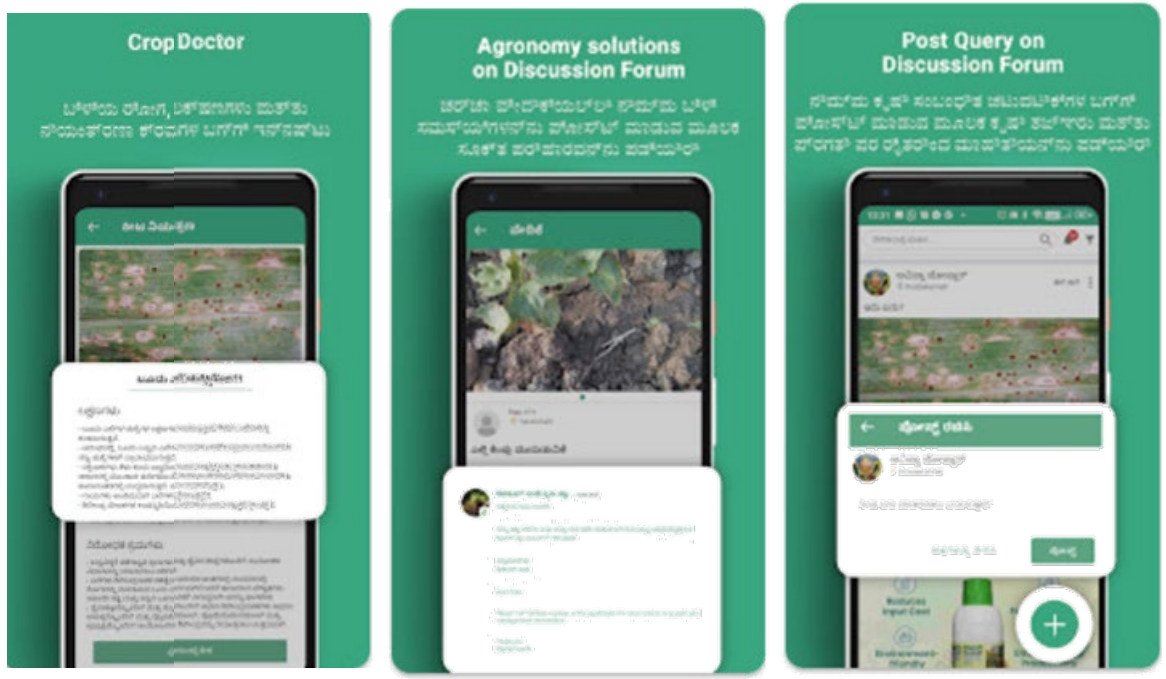
Conversations and interviews to understand smallholder farmer problems

Indian Farmer Problems

- Regionally based markets
- Low Productivity
- Managing drought
- Floods
- Pests
- Unpredictable yields
- Traditional farming techniques
- Farming knowledge

Test Minimal Usable Demo (MUD)

+ LEAN STARTUP



Minimal Useable Demo (MUD).

MEASURE: Customer sign ups

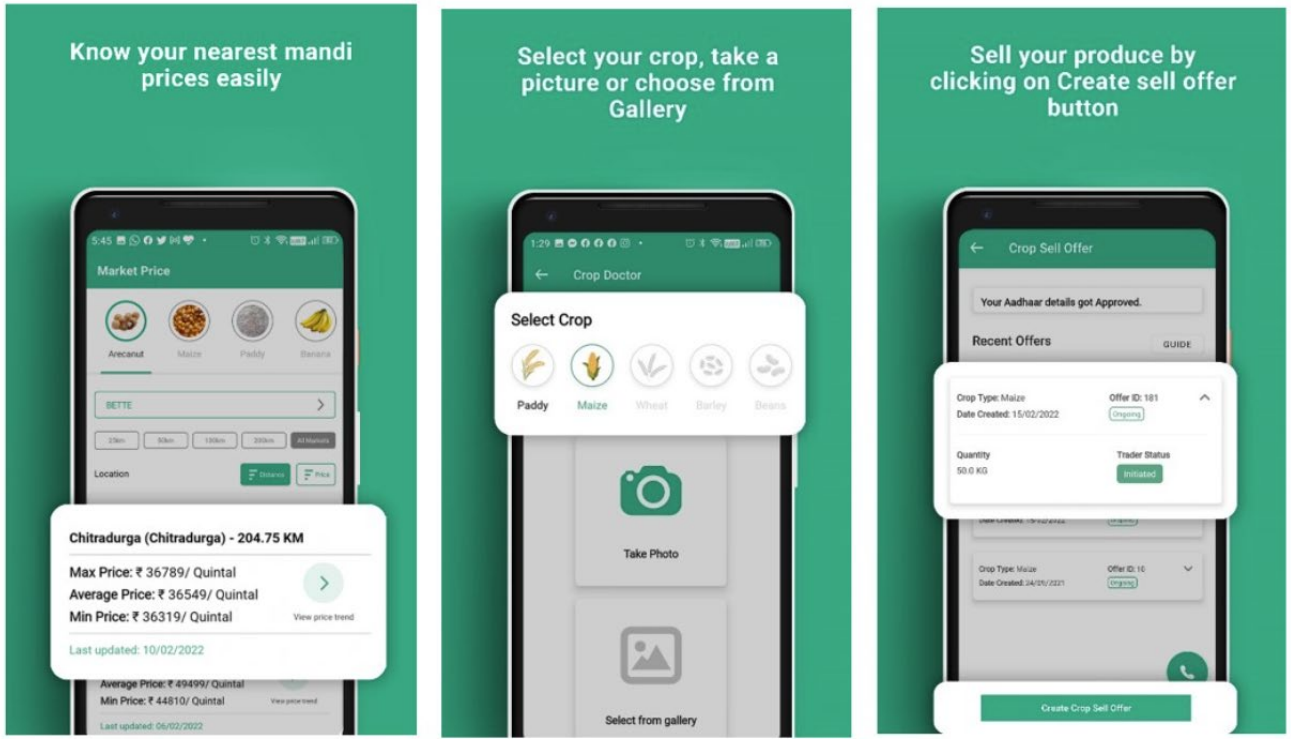
Launched and tested in Karnataka

Digital Saathi Build & Scale

+

AGILE DEV

Expanded to 5 other regions



digital saathi™

Our Premium Features.....

- Community
- Market Price
- Crop Practices
- News
- Insurance
- Credit

Digital Saathi Success Story

Digital Saathi – AgTech Check List

Precision Agriculture

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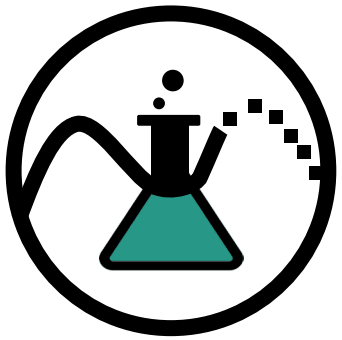

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