



Rice Doctor

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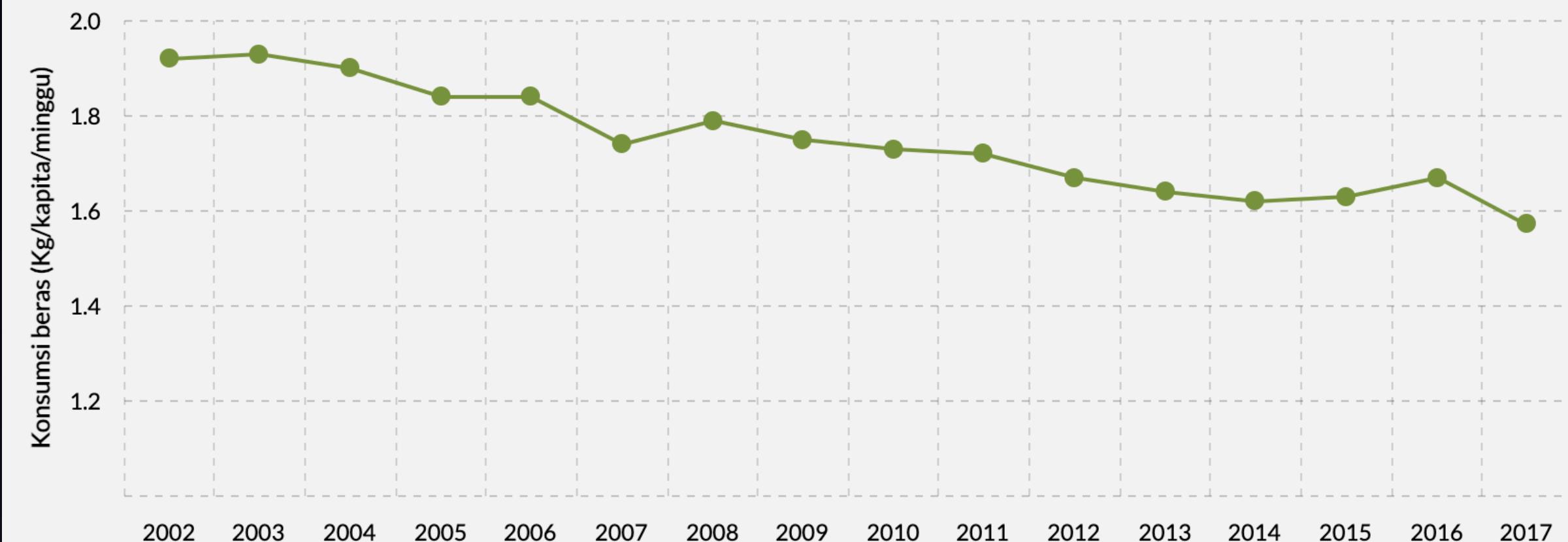
Pitching presentation

Bangkit Capstone Project by Team C23-PS152



Konsumsi beras penduduk Indonesia, 2002-2017

rerata konsumsi beras penduduk dalam seminggu



Konsumsi beras (Kg/kapita/minggu)

Sumber : Badan Pusat Statistik

lokadatA

the average rice consumption per person is 1.92 kg per week.

Ironi RI Negara Agraris: Kekurangan Stok Hingga Impor Beras!

NEWS - Aulia Mutiara Hatia Putri, CN

Indonesia Impor 407,7 Ribu Ton Beras Sepanjang 2021

AGROINDUSTRI



detikFinance

Kamis, 25 Mei 2023 18:45 WIB

350.000 Ton Beras Impor Masuk RI, Sisa 150.000 Ton Dalam Persediaan

Perum Bulog melaporkan total beras impor sebanyak 350.000 ton.

detikFinance

Sabtu, 13 Mei 2023 14:00 WIB

132 Ribu Ton Beras Impor Masuk Gudang Bulog, dari 4 Negara Ini

Beras impor yang telah masuk ke gudang bertambah 52.000 ton dari sebelumnya 80.000 ton. Artinya beras impor yang sudah masuk gudang Bulog sebanyak 132.000 ton.



Based on data from the Directorate General of Food Crops of the Ministry of Agriculture, the total area of crop failures from January to October 2021 period was at 92,124 ha.



Kolom

Tetap Waspada Kelangkaan Pupuk

Dian Yuanita Wulandari - [detikNews](#)

Pupuk Subsidi Langka, Kebutuhan 25 Juta Ton Alokasi Cuma 9,1 Juta Ton

tim | [CNN Indonesia](#)

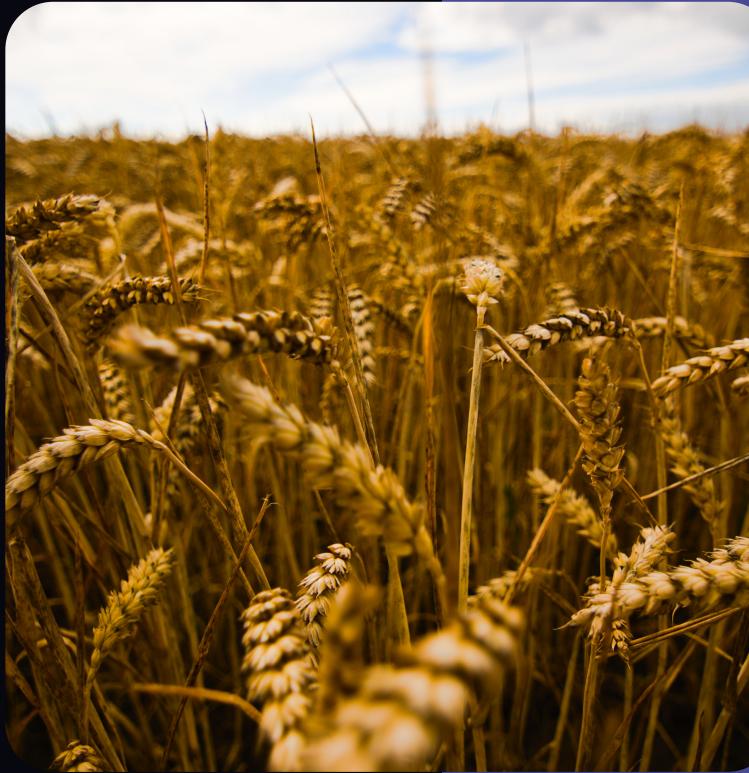
Sabtu, 24 Des 2022 11:00 WIB



RiceDoctor

Reason

Improving better qualities and reducing the risk of crop failure.



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Our project also aligns with the Sustainable Development Goals. Primarily, Goal 2 (Zero Hunger) and Goal 12 (Responsible Consumption and Production)

Existing Result

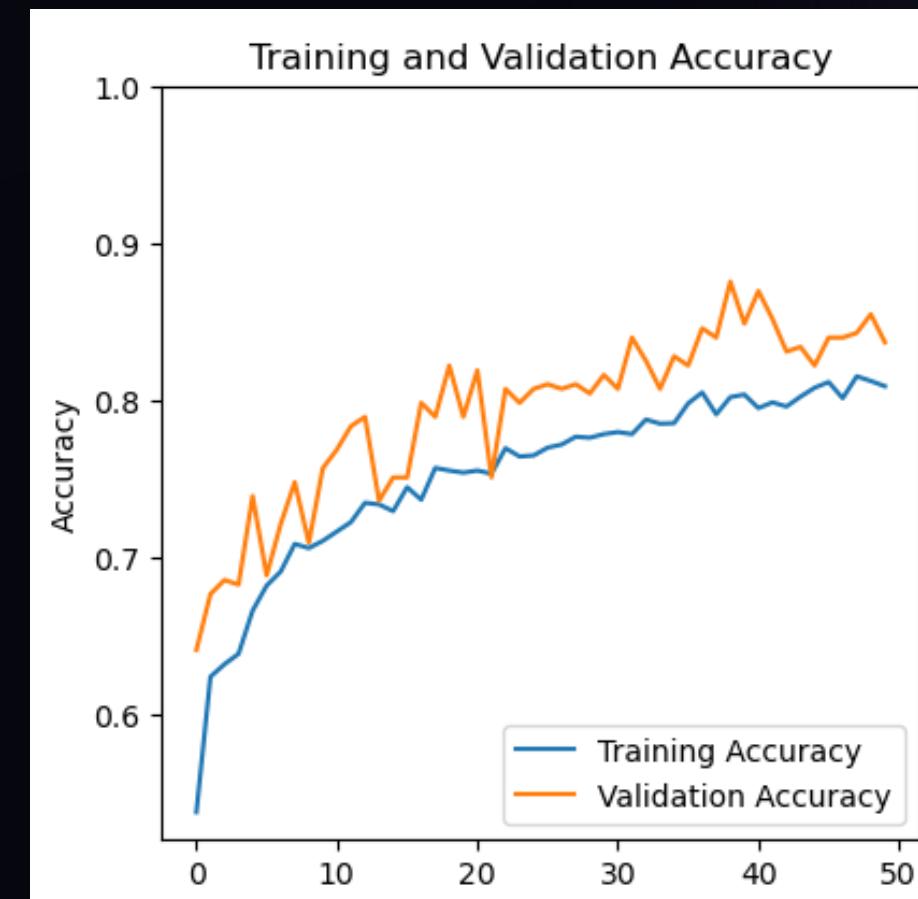
PictureThis - Plant Identifier

An application developed by Glority Global Group Ltd. PictureThis is used to identifies plants by using camera. The user can simply snap a picture of the plant they want to know more about. Moreover, the application can also diagnose plants if the plant has any disease and whatnot.

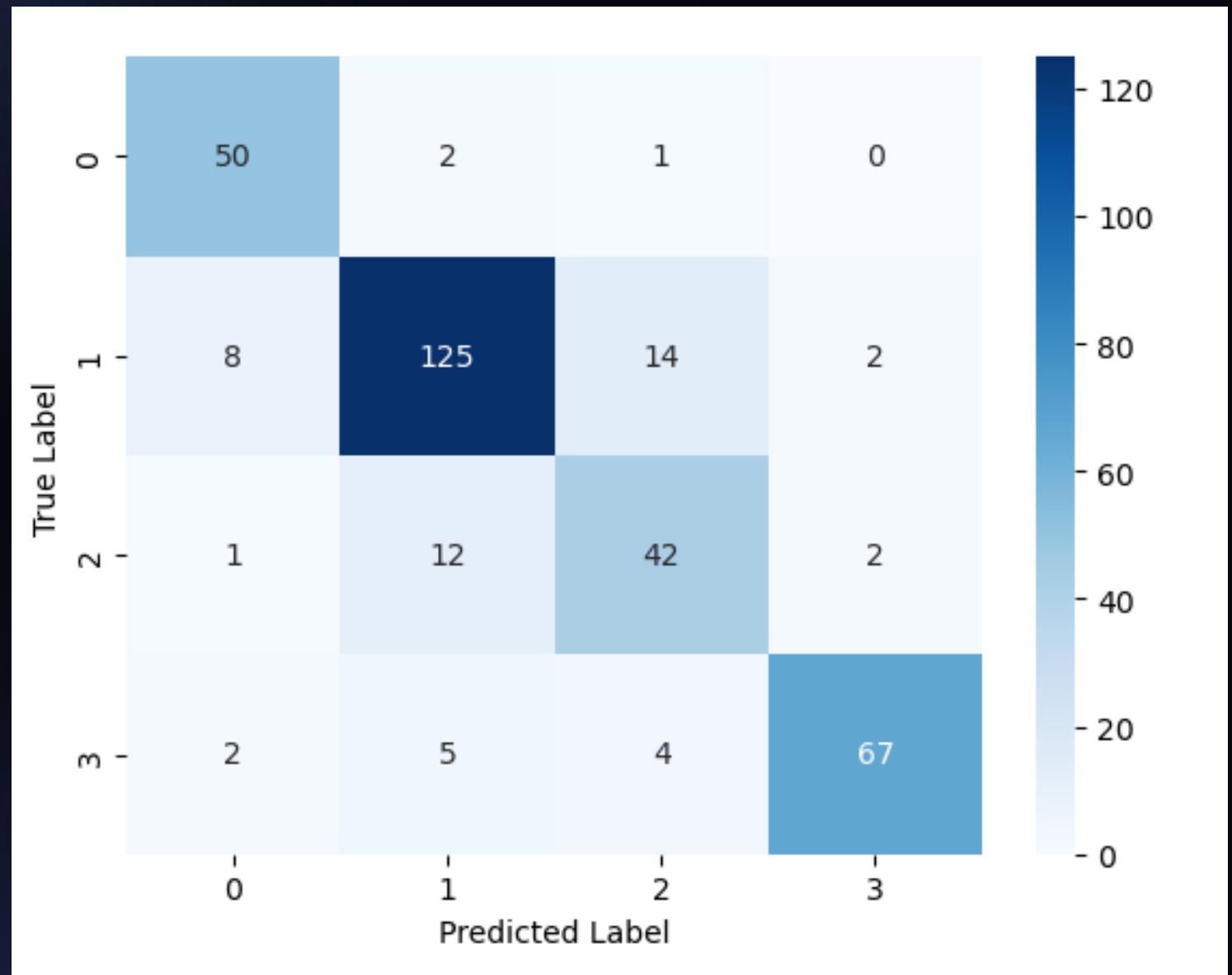


Implementation/Improvement & Reasoning

Layer (type)	Output Shape	Param #
keras_layer_1 (KerasLayer)	(None, 1280)	5,919,312
dense_3 (Dense)	(None, 512)	655,872
dense_4 (Dense)	(None, 64)	32,832
dense_5 (Dense)	(None, 4)	260
Total params: 6,608,276		
Trainable params: 6,547,668		
Non-trainable params: 60,608		



Implementation/Improvement & Reasoning



Classification Report

Class	Precision	Recall	F1-Score	Support
BrownSpot	0.82	0.94	0.88	53
Healthy	0.87	0.84	0.85	149
Hispa	0.69	0.74	0.71	57
LeafBlast	0.94	0.86	0.90	78
Accuracy			0.84	337
Macro Avg	0.83	0.84	0.84	337
Weighted Avg	0.85	0.84	0.84	337

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Proposed Solution

01

An android-based application designed to detect diseases in rice plants.

02

Allows farmers to easily capture leaf images using their smartphone cameras and receive instant diagnoses.

03

Has the capability to predict and classify diseases into four main categories: Brownspot, Hispa, Healthy, and Leafblast.

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Introducing Rice Doctor

Proposed Solution

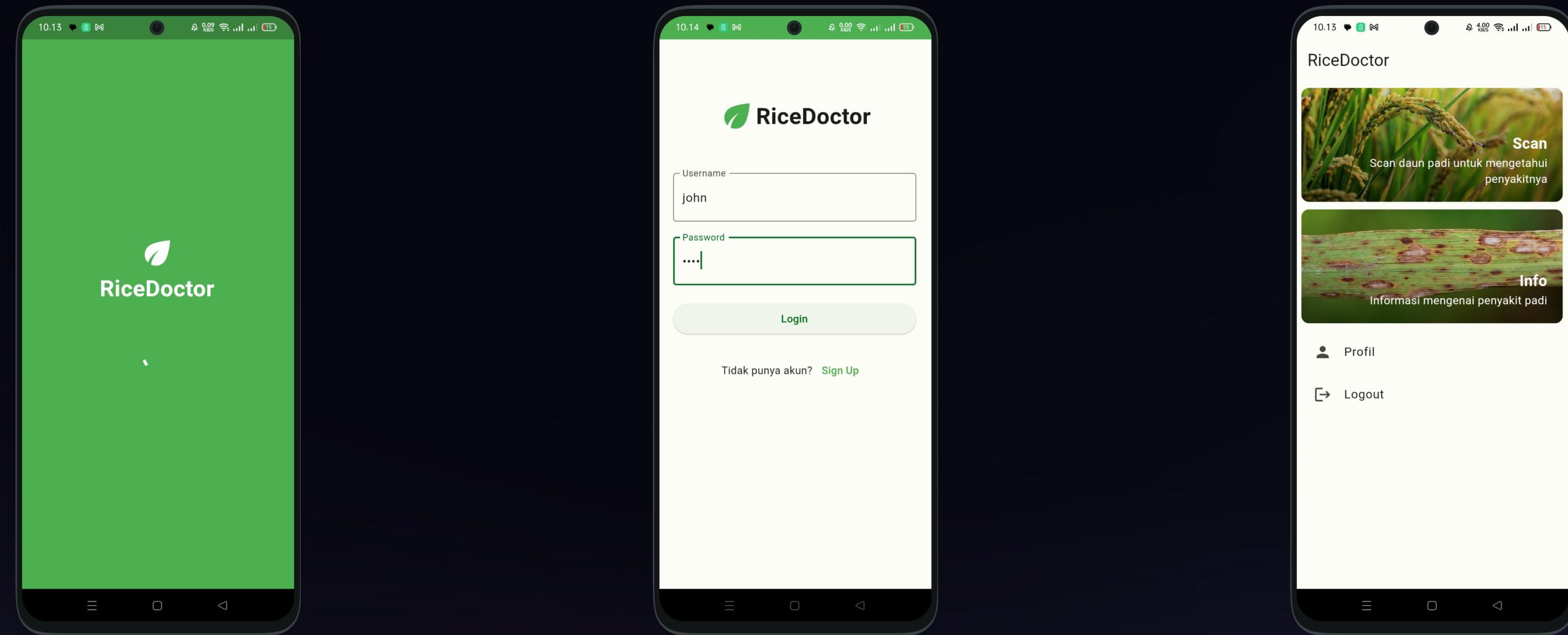
- 01 Disease Detection
- 02 Disease Information
- 03 User Authentication
- 04 Easy-to-Use Interface

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The main
features of
the Rice
Doctor app

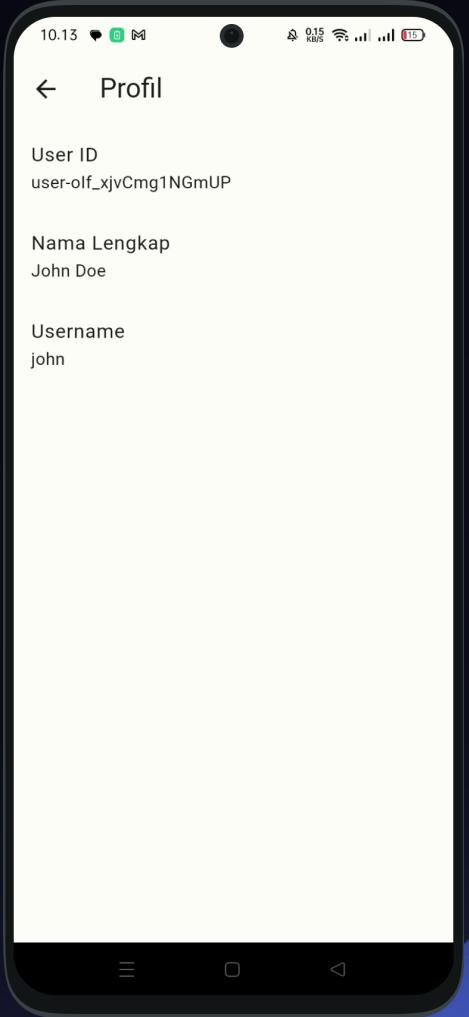
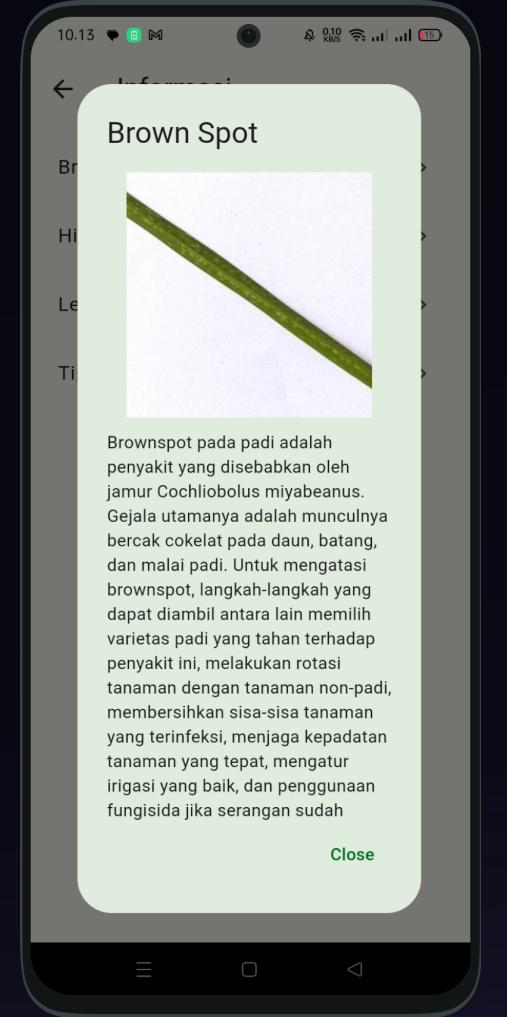
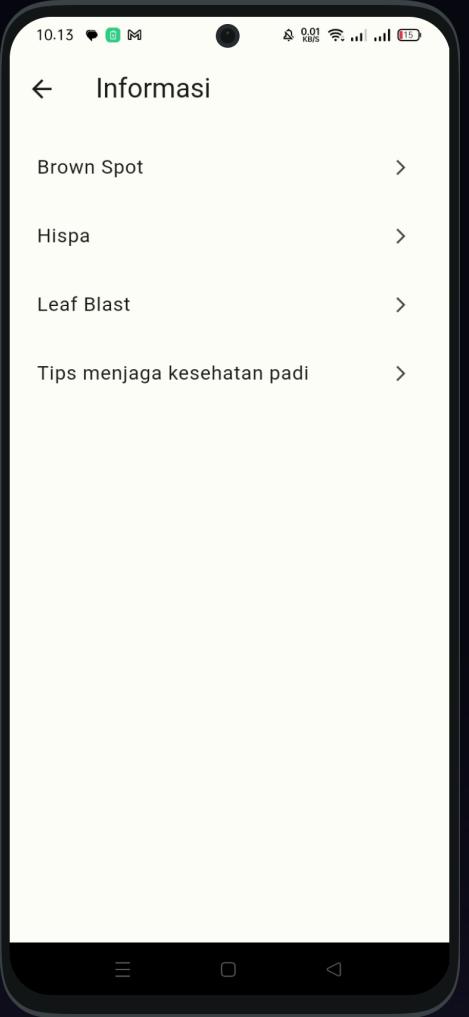
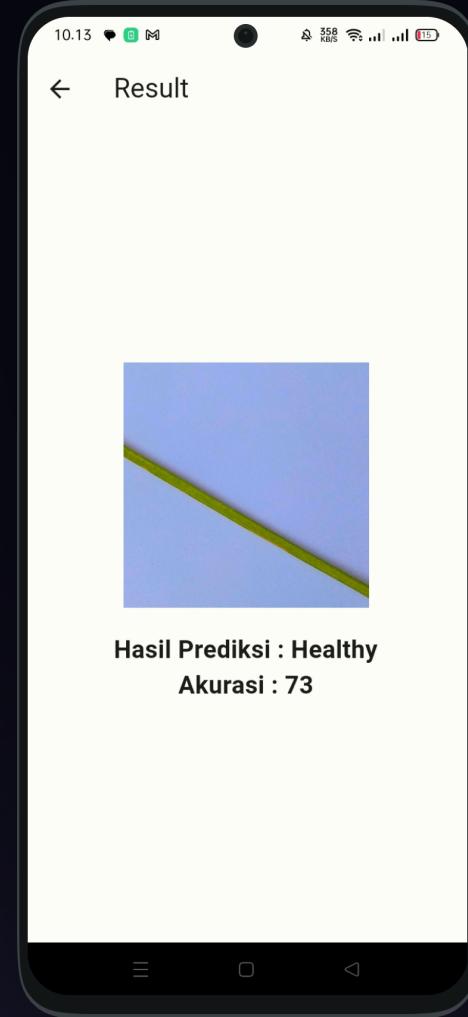
Result

Introducing our Application



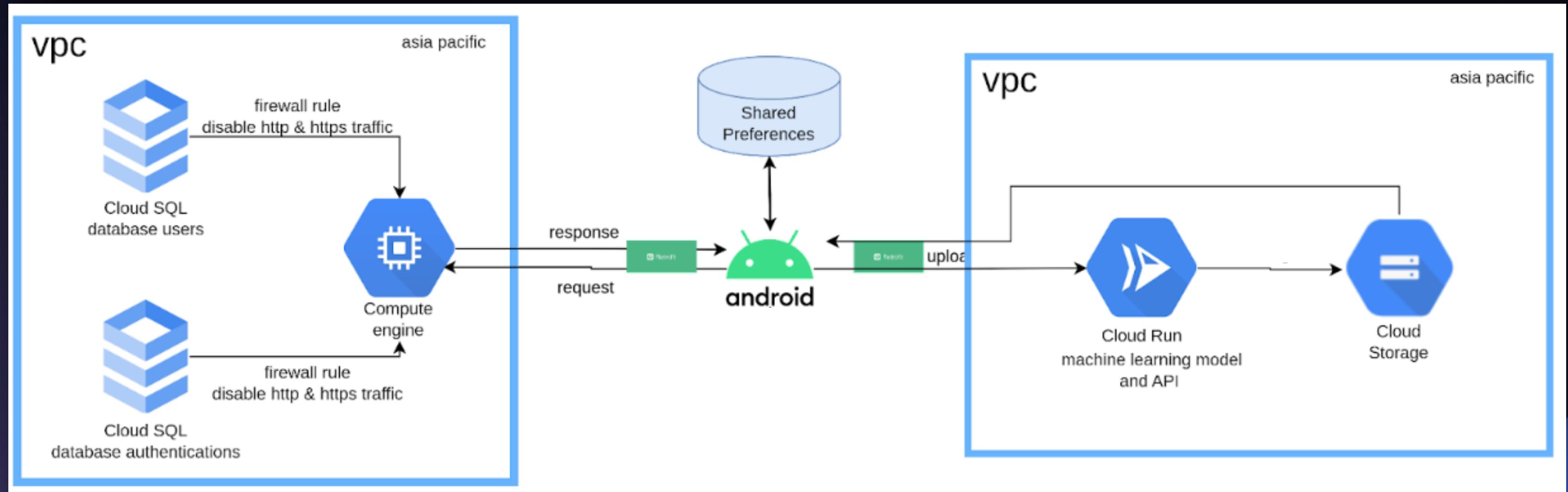
Result

Meet our Features!



Result

Back-end



Next Development



Recommendation



Upload Image with
GPS



Fertilizer
Transaction



Consultation



Offline Access



Target

The customers we want to cater for

Local Deployment Plan

Targets as Our Customers

**Farmers, Researchers,
Biologists, Government.**

**Age Range: 20 -
50+**

Why our target needs us.

Local Deployment Plan

Data Driven

We use 1000+ data to predict the machine learning outcome.

Various Features

From predicting the problems to solving the problems together.

Always being updated

As there are still much to be developed, our target market won't miss any new update

Revenue Stream

Online Ordering

Farmers can order fertilizer or medicine for rice from the nearest shop via smartphone

Premium Online Consultation

farmers can consult with experts via smartphone at an affordable cost.

Business Plan : Budgeting 1 - USD 5k / IDR 70m

Recurring Expenses				
No	Valuable Cost	Unit	Price per month in Rupiah	Total in Rupiah
1	Compute Engine	1	77.555	77.555
2	Cloud SQL	1 (Expected 50GB/month)	807.503	807.503
3	Cloud Run	1	0	0
4	Cloud Storage	2 (Expexted 150 GB/month)	51.654	103.308
5	Team Salary	6	5.000.000	30.000.000
6	Marketing Budgeting	1	6.000.000	6.000.000
Total			36.988.366	

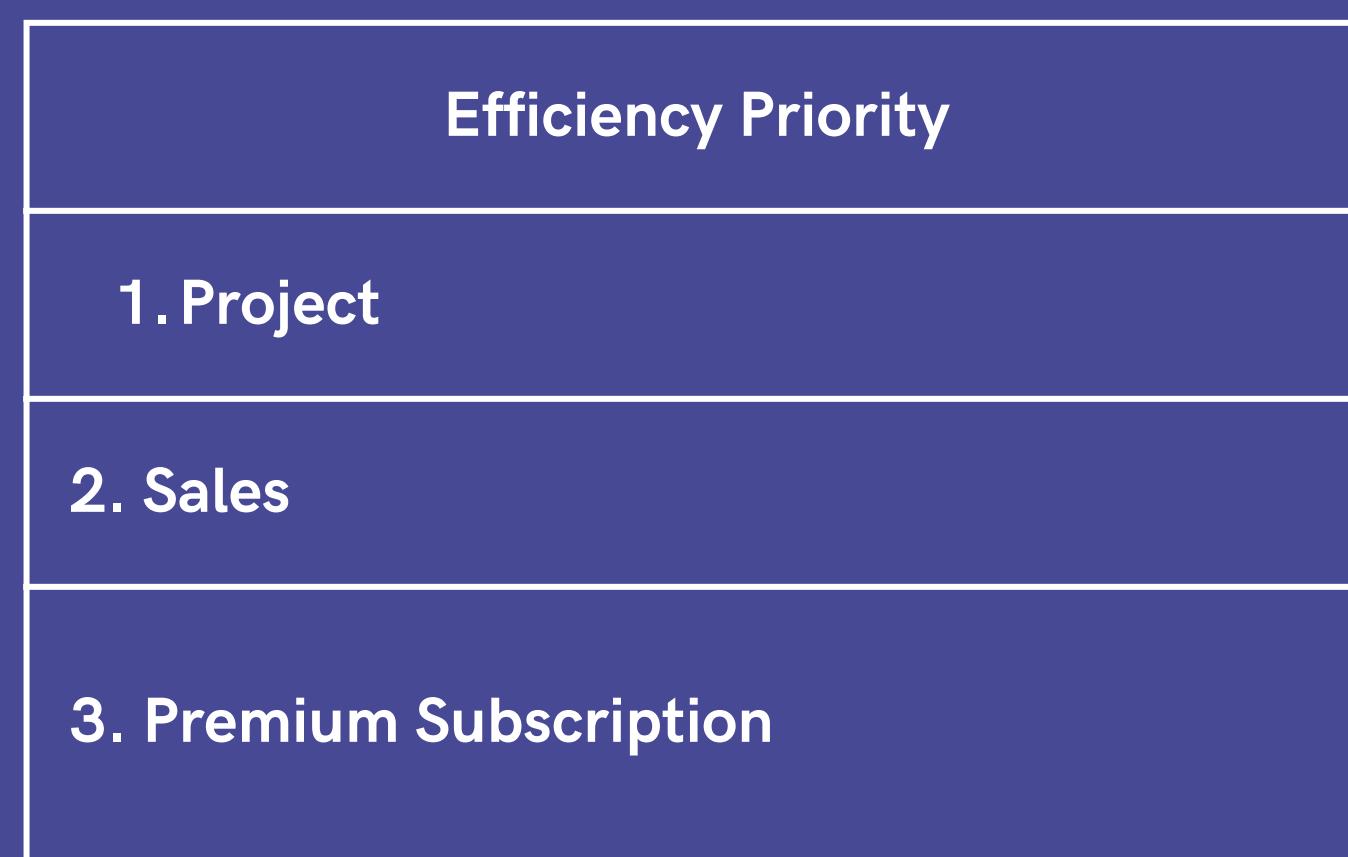
One Time Expenses				
No	Valuable Cost	Unit	Price per month in Rupiah	Total in Rupiah
1	Computers/Laptop	6	10.000.000	60.000.000
2	Phones	6	5.000.000	30.000.000
3	Google Play License	1	400.000	400.000
Total				90.400.000
Future Development				
No	Valuable Cost	Unit	Price per month in Rupiah	Total in Rupiah
1	Estimated Research Cost	1	9.500.000	9.500.000
2	Estimated Production Cost	1	1.000.000	1.000.000
Total				10.500.000

Business Plan : Budgeting 2 - USD 10k / IDR 140m

Category	Proportions	Budget (max) in IDR
All aspects covered in Budgeting - 1	50%	Rp 70.000.000
Additional Budget for Team Salary	15%	Rp 21.000.000
Additional Budget for Research/Ops	20%	Rp 28.000.000
Marketing and Sales	20%	Rp 28.000.000
Market research and competitive analysis	10%	Rp 14.000.000
Future Development / R&D	20%	Rp 28.000.000
Other Expenses (taxes, reserves)	10%	Rp 14.000.000

Business Plan - Sustainability

Source of Income	Income
Sales	Rp.40.000.000
Project	RP20.000.000
Premium Subscription	Rp30.000.000
Grants	Rp10.000.000
Soft Loan	RP5.000.000
Rounds of Funding	Rp40.000.000



**Based on the
5k/10k USD
Budgeting, our
expectations
are:**

5K Funding

Expected Runway: 6 months /
Expected Headcount: 6 people
Assets*: - 2 patent/cop
- 20 data
- 10 inventory

10K Funding

Expected Runway: 1 years
Expected Headcount: 12 people
Market Positioning:
Assets*: - 3 knowledge / trained persons
- 50 data
- 6 expertises

Milestone

June

Releasing MVP

July

Dataset refinement

August

Releasing Recommendation Feature

September

Discussing with the government

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December

Integration Feature fertilizer transaction

Our team

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Thank You!

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