



AGRIDIVISION

AN AGRICULTURAL MAPPING SYSTEM WITH DEMAND FORECASTING AND ALLOCATION

User Manual

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DEMAND FORECASTING AND ALLOCATION**

USER MANUAL

DISCLAIMER

This software and hardware project and its corresponding documentation entitled “ AgriDivision: Agricultural Mapping System with Demand Forecasting and Allocation” is submitted to the College of Information and Communications Technology, West Visayas State University, in partial fulfillment of the requirements for the degree, Bachelor of Science in Information Systems. It is the product of our own work, except where indicated text.

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INTRODUCTION

“AGRIDIVISION is an Agricultural Mapping System with Demand Forecasting and Allocation”, a web-based system that has a marketplace platform that connects farmers, business owners, and government sectors. The system also consolidates information on the prices of corn, coffee, and coconut in the market for monitoring. The target users of the system are farmers and business owners. The system was evaluated in terms of its functional suitability, performance efficiency, compatibility, usability, reliability, security, maintainability, and portability in performing market on Department of Agriculture and Philippine Coconut Authority operations by intended users, field experts, and system developers.

SYSTEM REQUIREMENTS

HARDWARE SPECIFICATIONS

- Operating System: at least Windows 10 Pro or latest versions of operating system
- RAM: at least 8 GB RAM
- The system can be accessed on any device as long as there is an internet connection within the device's vicinity. Though the system is web-based, it is advisable to use a computer or laptop for better view and access to the system's features.

SOFTWARE SPECIFICATIONS

- Development Tool: Visual Studio Code version 4.0 and Bootstrap Studio version 4
- Mapping Tool: Google Maps Application Program Interface (API)
- Network Requirement: at least 5 mbps download/upload speed
- Required Web Browsers: Google Chrome, Edge, Opera, Mozilla Firefox, Safari, etc.

INSTALLATION

USER SPECIFICATIONS

The individuals who may utilize the system can be anyone with minimal to great knowledge towards technology and is computer literate. The users who have these qualities are needed in order for them to fully grasp the concept of the said system and work on it easily.

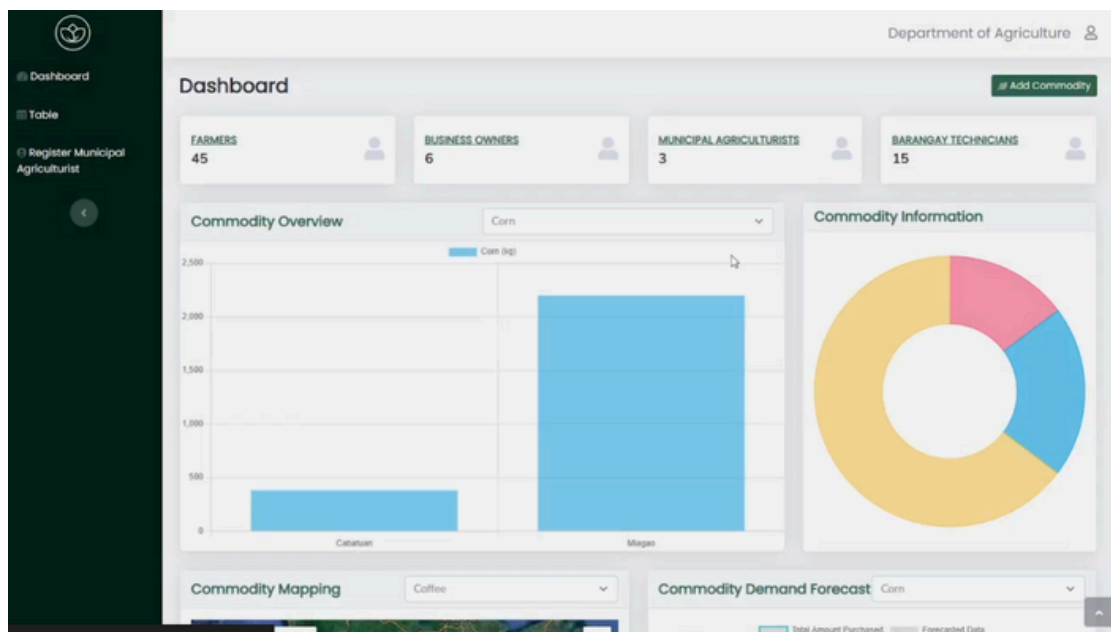
SYSTEM INPUTS AND OUTPUTS

For the completion of the study, the system is bound to project an output that would start from requiring the user to sign in or create an account based on what type of user they are assigned to (admin, farmer, municipal agriculturist, barangay technicians, business owner), and input the information required.

USAGE (SYSADMIN)

Log In or Sign Up

Start by entering your login credentials. If you're new, sign up as a System Administrator to create an account.



Dashboard Overview

After logging in, you'll see the main dashboard. This is where you can view all registered system users, including:

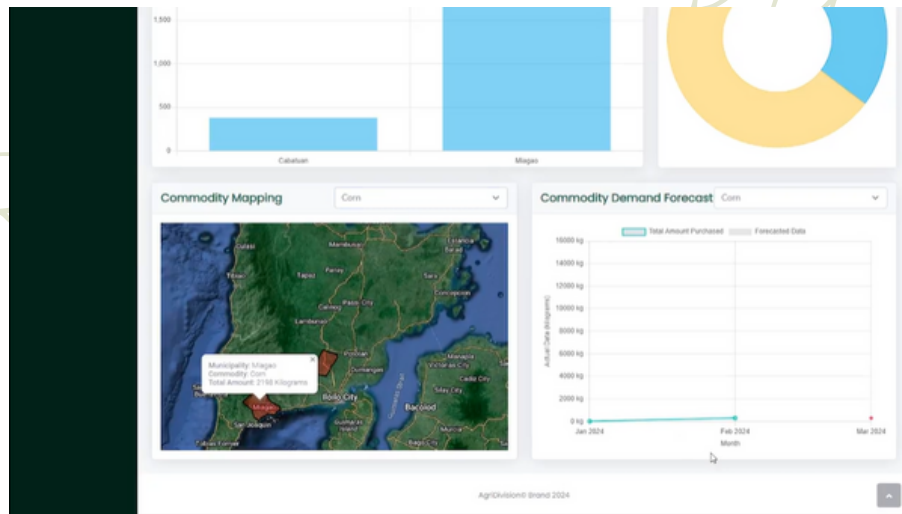
- Farmers
- Business Owners
- Municipal Agriculturists
- Barangay Technicians

Tracking Commodities

The dashboard also shows the commodities you'll use for analysis and reporting. These include:

- Corn, Coffee, and Coconut Supply: Track available stocks and supply levels.
- Purchase Transactions: Monitor all buying and selling activities.
- Land and Business Owner Maps: View the locations of farms and business owners on a map.

USAGE (SYSADMIN)



Tracking Commodities

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- Corn, Coffee, and Coconut Supply: Track available stocks and supply levels.
- Purchase Transactions: Monitor all buying and selling activities.
- Land and Business Owner Maps: View the locations of farms and business owners on a map.

The screenshot shows the "Municipal Agriculturists Table" with the following data:

| Municipality | Email | Contact Number |
|----------------------------------|-------------------------|----------------|
| Ajay Municipal Agriculturist | ajay.illo@gmail.com | 639-9029-5544 |
| Cabatuan Municipal Agriculturist | cabatuan.illo@gmail.com | 639-4027-5531 |
| Magu Municipal Agriculturist | magu.illo@gmail.com | 639-3685-2833 |

The table includes a search bar, a "Show 10 entries" dropdown, and pagination controls (Previous, 1, Next). The footer indicates "Showing 1 to 3 of 3 entries".

Municipal Agriculturist Information

Under the Dashboard tab, there's a table showing detailed information about each Municipal Agriculturist.

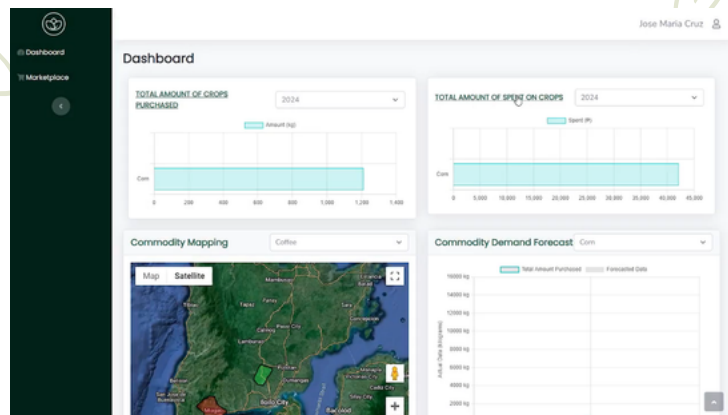
Registering a Municipal Agriculturist

To add a new Municipal Agriculturist, go to the Table tab and select Register Municipal Agriculturist. Here, you can input their details and assign them to their respective municipality.

USAGE (BUSINESS OWNER)

Log In or Sign Up

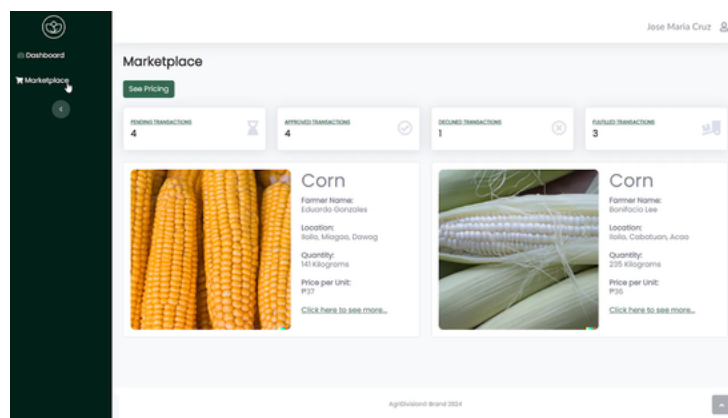
Start by entering your login credentials. If you're new, you need to register as Business Owner an account.



Dashboard Overview

After logging in, you'll see the main dashboard. This is where you can view all transactions, including:

- Total amount of crops purchased
- Total amount spend on crops
- Commodity Mapping
- Commodity Demand Forecast



Marketplace Overview

Under the dashboard tab, we have a Marketplace. This is where you can view all your transactions with crop details, including:

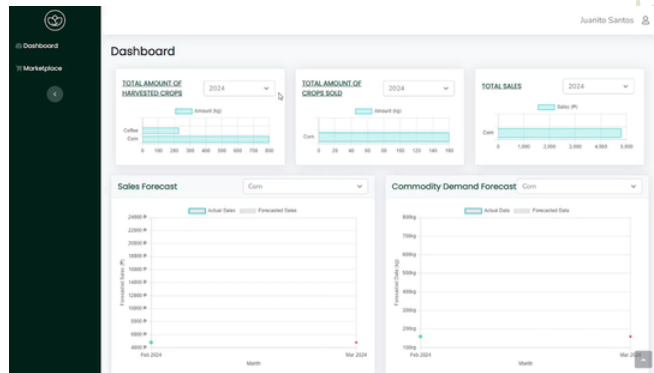
- Pending, approved, declined, and fulfilled transactions
- Crop details

This overview helps business owners decide what they want in terms of quality and quantity of the crops.

USAGE (FARMER)

Log In or Sign Up

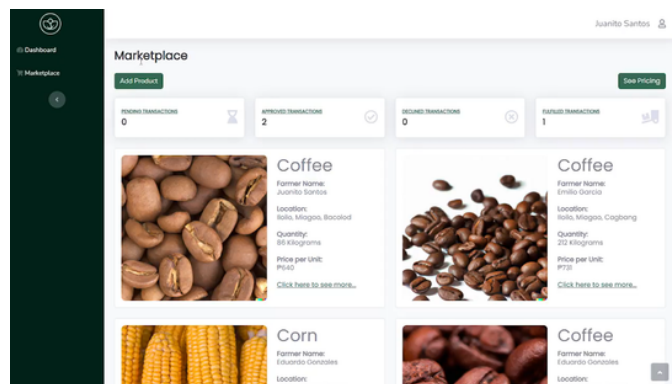
Start by entering your login credentials. If you're new, sign up as a Farmer to create an account. Farmers should provide a complete credentials with valid permits.



Dashboard Overview

After logging in, you'll see the main dashboard. This is where you can view all transactions specifically for farmers, including:

- Total amount of harvested crops
- Total amount of crops sold
- Total Sales
- Sales Forecast
- Commodity Demand Forecast



Farmer's Marketplace Overview

Under the Dashboard, you'll see the Marketplace tab. This is where you can view all transactions specifically for farmers, including:

- Pending, Approved, Declined, and Fulfilled transactions
- Crops selling
- Product Info
- Pricing

The pricing helps the Farmers to manage their crop pricing accordingly. Further transactions are being discussed together with the business owners for fairness of the deal.

TROUBLESHOOTING FOR FIXING POSSIBLE BUGS

1. Check if the website is down

Ensure that the local server is running. If it's down, restart the server (e.g., Apache, Nginx, or local development environment like XAMPP or MAMP).

2. Check the internet connection

Verify that your device is connected to the local network. A missing or weak Wi-Fi connection can prevent your browser from accessing the local server.

3. Use a different device

Try accessing your local website from another device on the same network. This helps confirm if the issue is with the server or just your current device's setup.

4. Analyze the error message

Look for specific error codes like *"403 Forbidden"* or *"500 Internal Server Error"* in your browser. These can help you pinpoint if it's a permissions or server configuration issue.

5. Switch to another web browser

Test the website in a different browser to rule out issues related to your current browser's settings, extensions, or cached data that may block the website.

6. Verify the DNS records

Since you're on localhost, make sure the hosts file points to 127.0.0.1 for your website's domain.

7. Check the error logs

Check the logs for your web server (Apache) or application logs to identify any errors, such as missing files, database connection issues, or configuration problems.

8. Use developer tools

Open the browser's Developer Tools (F12), check the "Network" tab for failed requests, and review the "Console" tab for JavaScript errors or network-related issues that prevent loading.

FAQ (FREQUENTLY ASKED QUESTIONS)

What is AgriDivision?

AgriDivision is a web-based platform that serves as a marketplace connecting farmers, business owners, and government agencies. It also gathers and displays market prices for corn, coffee, and coconuts to help users track and monitor trends. The system is designed mainly for farmers and business owners. Experts, developers, and users tested it to ensure it works well, is easy to use, secure, reliable, and compatible with the operations of the Department of Agriculture and the Philippine Coconut Authority.

What kind of agricultural materials can farmers input?

Farmers may input agricultural materials including but not limited to Corn, Coffee, and Coconut.

What type of users can access the mapping features of AgriDivision?

Farmers and business owners can freely access the mapping features of the system.

Where does AgriDivision get all the data?

The data is being provided and validated by the Municipal Agriculturist, Barangay Technicians, and Farmers.

Is AgriDivision available for use nationwide?

No. AgriDivision is only limited to Region VI, Western Visayas in terms of features and access. Nationwide features may be added in the future updates.

Can farmers input their livestock such as cows, chickens, etc.?

No. Only the agricultural materials, specifically 3Cs (Corn, Coffee, and Coconut).

CONTACT DETAILS OF THE DEVELOPMENT TEAM



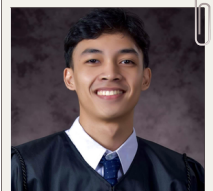
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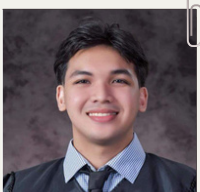
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