

# Secure And Corruption Controlling Automatic Ration Distribution System

Isha Ramdas Patil<sup>1</sup>, M.D.Jakhete<sup>2</sup>

<sup>1</sup>Digital Electronics, G.H.Raisoni Institute of Engineering and Management, Jalgaon, Maharashtra, India

[isha\\_r.patil@gmail.com](mailto:isha_r.patil@gmail.com)<sup>1</sup>

<sup>2</sup>Assistant Professor, G.H.Raisoni Institute of Engineering and Management, Jalgaon, Maharashtra, India

[mayur.jakhete@raisoni.net](mailto:mayur.jakhete@raisoni.net)<sup>2</sup>

## ABSTRACT

Ration cards were provided to the public so that the person who is not able to buy the food can get food in low cost prize by the government. Today the problem of corruption at the Public Distribution Shop is a serious issue. The main reason behind corruption is that there is no control over this system. The system is completely run by the human beings; no automatic control is there, so all rights are directly given to the person running the shop. In this paper we are introducing an automated system that is used for controlling corruption. The system uses the Aadhar card for the authentication. With the help of QR code detector Aadhar card is authenticate and data is transferred to the PC to make a data base. The interfacing of PC is done with ARM7 processor using RS232 cable.

**Keywords:** Grain Quality, Aadhar card Identification, RS485 BUS, Image Processing , Weight Sensor

## I. INTRODUCTION

In India the resources are finite, and desires are infinite, no one can have as much of a good as they desire. This means that the resources are scarce. This causes the need for a way to divide resources up among individuals, or rationing systems. So we are using public type Rationing System. The government and public own and share resources, and the government makes the decisions towards economic goals. Government often sets the price and allocates resources to produce the things that it thinks the country should produce.

Public distribution system i.e. rationing distribution is one of the widely controversial issues that involves corruption and illegal smuggling of goods. All these happen because every job in the ration shop involves manual work and there are no specific high-tech technologies to automate the job. Because of intervention of manual work there are lots of illegal activity occurs.

In this paper we propose the concept about to replace manual work in public distribution system (rationing distribution system) by automated system which will be

installing at the ration shop .In this automated system we replace the convectional ration card by an technique using QR code detection of Aadhar card by using app

So authentication with the help of aadhar card. Government should have control over all transaction happen at ration shop, to involve government in the process we can connect the system which is at ration shop to the government database via GSM module.

In this system we will remove man power to distribute the Ration materials like sugar, Rice, Wheat Etc. It will take less time to give the people and respective person can took any time like ATM machine. And also the authorized person cannot sell. We will have an automated rationing system. "Here, we are designing a system where a person displays his/her Aadhar card and our system gives the Ration to that user. Thus corruption is reduced.

## II. PROPOSED SYSTEM

In this system we will remove man power to distribute the Ration materials like sugar, Rice, Wheat Etc. It will take less time to give the people and respective person

can took any time like ATM machine. And also the authorized person cannot sell. We will have an automated rationing system.

### A. Block Diagram

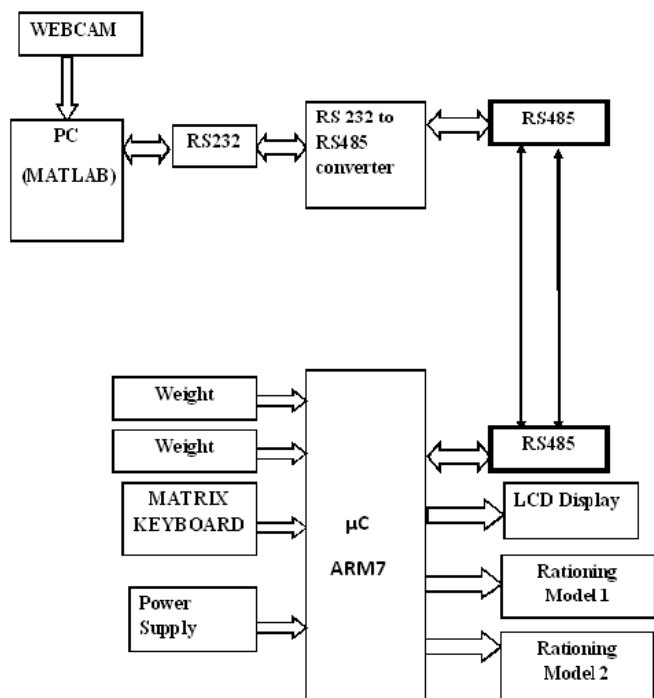


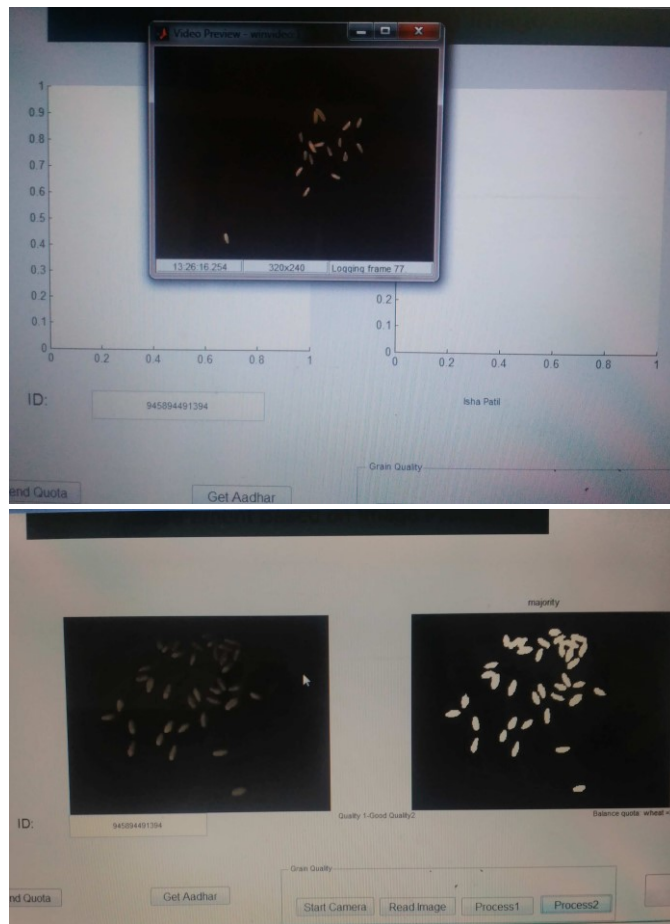
Figure 1.1: Block diagram of ration system

Here, we are designing a system where a person displays his/her Aadhar card and our system gives the Ration to that user. Thus corruption is reduce.

### B. Experimental Setup



Snap1.2 Hardware of Ration System



Snap1.3 Capture image of grain.

Take picture of grain using webcam. Process on picture in MATLAB using image processing toolbox to extract color features(RGB). Compare the color with database if in acceptable range send indication to arm. So,quality of grain is also detected.Also send color information to pc server using RS485 protocol so,quality of grain good or bad is detected.Adhar card is authenticate by using QR code scanner app then person is identified

### C. Advantages

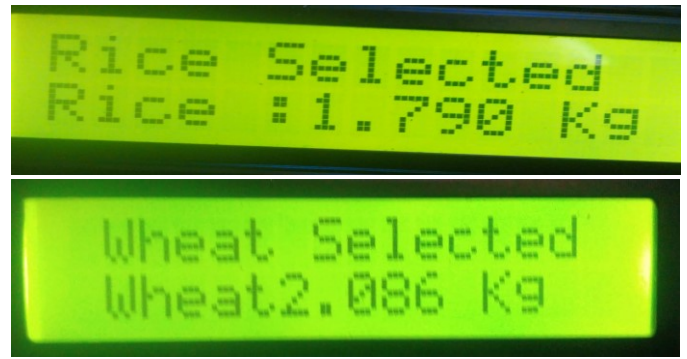
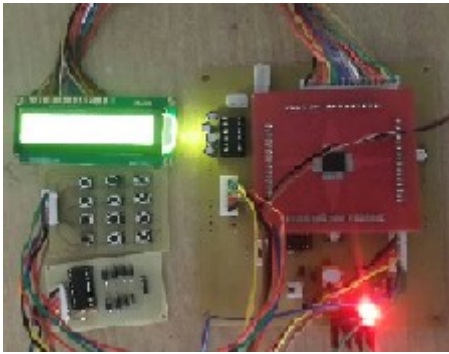
1. No corruption
2. Better quality delivered
3. Exact amount (Quantity) delivered
4. More Accurate and faster due to Digital system.

### D. Applications

1. Stock maintenance in industry
2. Rationing system
3. Commercial purpose

### III. RESULT

This system is based on Adhar card authentication of customer. Here each customer is provided with Adhar cards. In traditional ration card system, customer can take his quota by showing ration card at shop at once, but in this system, by using Adhar card and password. First user is authenticated, Then system shows the balance of person.



User will enter the amount of Kg he want to withdraw. System checks his account and respective amount of message is send through GSM module on his/her mobile.

### IV. CONCLUSION

As this system is a propose system we can see that by using such a system we can avoid corruption in ration/public distribution system to a large extend. This system has greater scope in future. As there is no manual data stored and all information is stored in database, the higher authority can check the details as and when its necessary through the use of servers. In this proposed system, the current rationing system is automated which can reduce the human error.

### V. REFERENCES

- [1] Ministry of Consumer Affairs, Food and Public Distribution Department of Food and Public Distribution, Annual Plan 2011-12.
- [2] "UID AND PDS System"
- [3] Neha Pardeshi, Trupti Desale, Prajakta Bhagwat, Ruchali Ahire; Web-Enabled Ration Distribution and Controlling ISSN: 2277-9477, March 2012
- [4] Palak Parikh, "Distribution System Automation"
- [5] Peter Svedberg; "Reforming or Replacing the Public Distribution System with Cash Transfer.
- [6] K. Bala Karthik,"Closed-based ration card system using RFID and GSM technology," vol.2, issue 4, Apr 2013
- [7] A. N. Madur, sham Nayse, "automation in rationing system using arm 7," international journal of Innovative research in electrical, electronics, instrumentation and control engineering ,vol.1, issue 4, Jul 2013.