

# E-RATION CARD SYSTEM USING BARCODE

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## **ABSTRACT**

*In a growing and developing country like India specifically, Ration card is one of the important documents which poor people especially the one below poverty line need. All the people having a ration card to buy the various materials (sugar, rice, oil, kerosene, etc.) from the ration shops which are funded by government.*

*But as we know due to increasingly corruption and commercialization, it's becoming challenging day by day for people to get a hold of goods and stuffs what government sends in the same quality and quantity.*

*In current scenario, this system is having two drawbacks. Firstly the weight of the material may be inaccurate and inappropriate due to human manual mistakes and secondly, if we do not buy the goods and materials by the end of the month, they will re-sale to others without any intimation to the government and consumers. In this project, proposed an Automatic Ration Materials Distribution Based on Barcode.*

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## **INTRODUCTION**

In Today's world of fraud and commercialization, it becomes very difficult for common people to get directly the good and stuffs as and when delivered by government. Specifically in traditional ration system, most of the time the quality of goods are not same as given by government. Moreover the quality which common people and consumer get are very degradable. There is no specific measure or means for common people to check the quality which government has sent and by default they have to accept what distributor gives them.

They cannot complain or raise once voice against the injustice which happens due to fraud by Distributors. Hence to maintain transparency between government consumers and distributors, we have proposed a new method for goods and material distribution by means of barcode generation. This will also maintain privacy between the consumer and distributor.

Now at present government is offering sugar, rice w heat and edible oil and kerosene for different kind of users like APL, BPL people categorized based on annual income. To fulfill the demand of such greedy people government introduced fare price shops that is public distribution systems where in these poverty line people get ration card enlisting their details like name, amount of grains in kg or oils or kerosene quantity, their residence address etc. We in this research introducing use of barcode using AADHAR card which is unique identity of each customer .This will help us to minimize fraudulence.

The existing systems have drawback that we cannot monitor the distribution plus stock availability with each distributor. We will be tracking this through the application and status can be logged. We have tried to minimize

the human intervention as much as we can so as to run the system efficiently and cost efficiency is also considered here.



Fig.Ration Card

### LITERATURE SURVEY

**Title** - E-Ration System Using RFID and GSM Technology

**Authors:** Dinesh Aitwade

**Description:** The idea behind this paper is the advanced Ration Distribution System, named as Smart Ration Distribution and Controlling. Enormous measure of Govt. cash gets squandered because of defilement in the traditional Ration Distribution System.

This proposed system executes a straight forward PDA gadget (personal data assistant) with RFID tag utilized as an e - ration card set up instead of an ordinary ration card. This device is like the ticketing machine used by transport conductor or bank operator and the e - ration card is like swipe card. The consumer needs to utilize this card rather than a traditional ration card to get ration from the merchant.

**Title:** Development of E Public Distribution System (E - PDS) Using Smart Card

**Author:** Mr. Nishant Patel

**Description:** The Smart card based programmed ration shop is one of new approach in dissemination framework (PDS) helpful for cost effective ration distribution system. The present ration distribution framework has many disadvantages.

Few of them are like mistaken amount of goods, handling speed is low, holding up time is more, and material robbery in shop. Manual work is replaced by this system. The proposed programmed ration look for framework depends on Smart Card innovation that replaces ordinary ration cards. Here using this system, the RFID labels are given rather than ordinary ration cards.

**Author:** Dhanashri Pingale

**Description:** In her paper has described a Centralized Web Enabled Ration Distribution and Corruption Controlling System is the project that will allow a smooth and easy ration distribution. The paper explains the concept of ration distribution and controlling.

This system enabled the distribution of food equally among poor people. The commodities are stored in storage tank, when goods are inserted in the FPS, then that quantity of goods is updated in web server. That website can be accessed by the collector whenever he requires the ration from respective ration shop.

**Author:** Shivabhakt

**Description:** It described the concept to automate the PDS, a Government of India initiative process in which a fixed amount of ration is provided monthly to the people by the PDS stores. The increased corruption in the market sector can be prevented if the system becomes automated, increase in adulteration can be prevented as well, the hoarding done by the officials and laborers of government.

### **LIMITATIONS OF EXISTING SYSTEM**

Following are some limitations of the existing Ration card system:

- 1)The current Ration Card system is completely manual process.In the existing system,ration card details are inserted manually.
- 2)Lots of inaccuracy in the existing system.No algorithm used for calculation in support and confidence.
- 3)In the existing system,a lot of malpractices happens while the distribution of ration.
- 4)Customer have to weight to long for the ration so waiting time is more.
- 5)The weight of the material may be inaccurate and inappropriate due to human manual mistakes.
- 6)If we do not buy the goods and materials by the end of the month, they will re-sale to others without any intimation to the government and consumers.
- 7)There is no specific measure or means for common people to check the quality which government has sent and by default they have to accept what distributor gives them.

### **PROPOSED SYSTEM**

In proposed work is first of all we are going to make use of E-government technology that is being implemented in almost every area of government administration. Corruption and degradation of quality of goods would be using ERationing system.

User would be registering online using personal credentials and information as registered. Also family information needs to be given as input while registering. Thus each time whenever the person gets notification about goods and services delivered, he needs to go through the verification process to prove he is the authorized person.

Once verification is completed successfully, he can collect the quantity as logged into the system. Using bar code, it will be possible to uniquely build a module for each customer.

Distributor will not have to much authorities and also distributors system will directly connected to the governments server so that the chances of corruption will be reduce.

When distributor will distribute the ration to the customer then just before that one notification will send to the customers mobile number so that customer can check the ration he took and the ration show in the message is same or not.

### **ADVANTAGES OF PROPOSED SYSTEM**

- Transparency between government, consumer and distributors.
- Using barcode, consumers can view the quality and quantity of goods assigned to them.
- The proposed system replaces the manual work.
- stop bogus customer.
- Government can see how much grocery distributes to the customer and how much grocery remains.
- Corruption from the distributors end will be completely finished.
- Customer does not required that ration book.He can only login using mobile and show his barcode to the distributor.

### **CONCLUSION**

In this paper, we have explained how the influence of distributor can be minimized and more power can be directly given to consumer. This project will provide safe and secure method for consumer and can directly access to the goods granted to them. Introduction to Barcode technology makes this more transparent for government and distributor.

There are few drawbacks in the existing system, such as all the data is handled manually and there is no technology involved in the system, secondly if the materials are not bought at the end of month, then they will sell too it without any intimation to customers and government.

Hence we can overcome these drawbacks using our proposed system. A system we can avoid corruption in ration/public distribution system to large extend.

This system is 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. Properly distribution of gains to customer.

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