

RESEARCH ARTICLE



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E-RATIONING SYSTEM

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ABSTRACT

Public Distribution system is an Indian food security system. The Government of India taking an effort to provide rationing food items to all citizens of India allotted Fair Price Shops under Ration Distribution System. Essential food such as Rice, Wheat, Sugar, Kerosene, etc., is supplied to the targeted family for every month by the Government of India. Rationing distribution is mostly involves corruption and illegal smuggling of goods. All these happen because every work in the ration shop involves human interference and there is no special automated technology to find fault in the work. Because of interference of manual work there are lots of illegal activity occurs. The illegal activities are like, many families do not claim their quota of ration, yet few families manages to acquire cards of other families also wrong entry in amount of products that given to the people and some do not have idea about how much quantity of ration provided by government to them etc. The aim of this paper is to organize and summarize existing rationing system by modernizing in it. This will also helpful to promote Government new scheme "Anna Suraksha Yojana."

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Public Distribution System is established by the Government of India under Ministry of Consumer Affairs, Food, and Public Distribution and managed synchronously with state governments in India. The main motto of PDS is to distribute subsidized food to India's poor people who are valid ration card holders. The allocation of the ration cards is handled by the state governments. A ration card holder should be given 35 kg of food grain with

affordable rate. But, there is no serum about the efficiency of the distribution process. In order to improve the current rationing system, we are implementing e-Ration Shop with electronic device. Here we are going to use an electronic device for shopping purpose. Using this device card holder can get subsidized foods from the ration shop. The main reason for using this system is to remove the drawbacks of the present system of issuing ration

and make it transparent. The main drawback in the existing system is that, the PDS has been not efficient for its urban people and it can't fulfill demands of poor people with increasing population. Also many retail shopkeepers do black marketing using number of bogus cards to sell subsidize food grains.

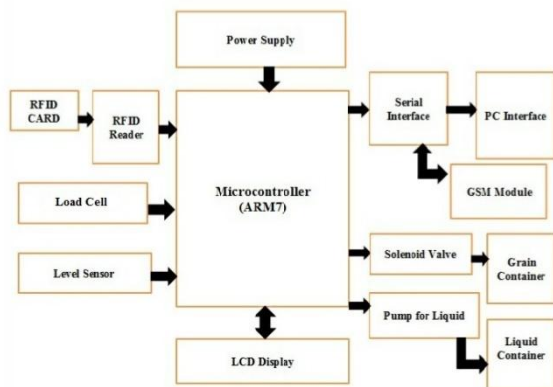
Most of the times Users do not get proper ration in case of quantity. What's meant for them or the farm produce procured by the shops is diverted to the open market. So in order to avoid all these drawbacks we are going to use the E-Rationing System with Electronic device which will help us to avoid the corruption in PDS if not demolish it.

I. Literature Survey

The PDS needs to be redesigned and there is a need to explore the possibility of introducing new ideas such as smart cards, food stamps and food credit/debit cards to eliminate starvation and make food available to the poor wherever they may be in affordable manner. To prevent corruption the United Nations Industrial Development Organization (UNIDO) and the United Nations Office on Drugs and Crime (UNODC) have joined forces to carry out study, which looks at the nature and extent of the problem. The e-Rationing System will help us to monitor the ration material till it reaches the storage areas and also the distribution at local people will be centralize through a web application which will keep record of user id and password for every people. So there is no involvement of any person directly with distribution system.

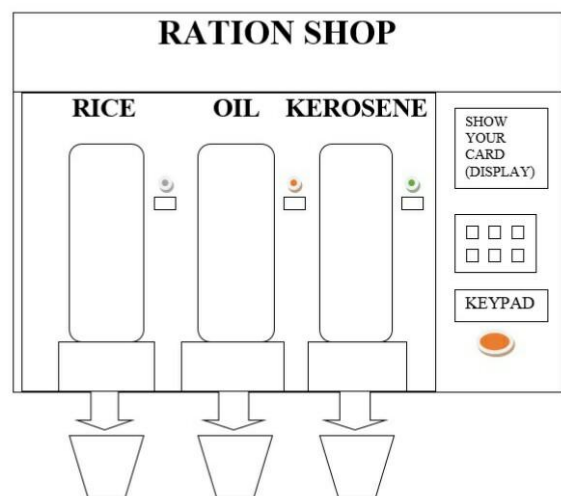
II. Proposed System Description:

1) Block Diagram:

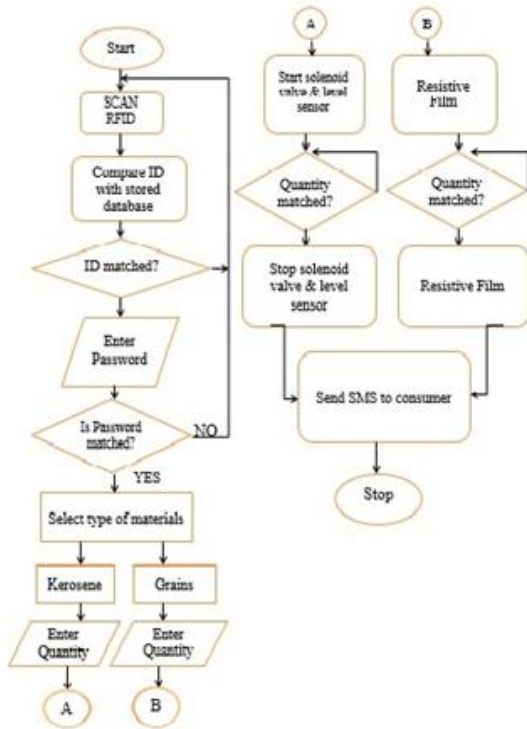


2) Methodology

In proposed system the customer registration is done at each ration shop for ration card. By collecting the personnel details of all customers RFID card is provided to the Head of the family. RFID card which is used to buying their monthly ration. RFID tag and RFID reader are used for identification purpose. When RFID tag read by reader it transmit the unique RFID number to the controller through UART. Then controller will scans the RFID tag is valid or not. If it is valid, it asks for password from the customer. While entering the password, controller matches that with database. If valid member then the name and the allotted amount of ration is displayed on the LCD. Using keypad once can enter the actual amount of product that they want to buy. After that by getting the signal from the keyboard the valve of particular container containing the products will open for specific time. Then the controller continuously monitor the falling amount of product with actual entered amount. When it matches with actual amount then the valve of container will close. The system has a one pump and one valve for oil and grains respectively. The total amount paid by the customer will be displayed on the LCD with purchased product quantity. At the same time message will be sent on customers mobile through GSM. Thus it works for e-rationing system.



III. Flowchart:



IV. ADVANTAGES

- Corruption in the Government and market sector can be prevented if this system becomes automated.
- Increased adulteration in consumables can be prevented.
- Cost effective approach, Time saving approach, compact in size.
- This system helps to maintain the data properly.
- This system is very accurate, simple and low power consumption, which is used for the real time applications.

V. CONCLUSIONS

The old Ration Distribution System (RDS) has drawbacks like low processing speed, long waiting time at ration shop to get material. This proposed project provides a safe and efficient way of Ration Distribution System (RDS). This proposed project definitely overcome the problems in existing system & helps in preventing corruption. This new technology will make a great change in RDS and provides benefit to the government about current

stock and reduce labour work. Also it avoid black marketing of stock.

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