

# E-Rationing System for Monthly Ration Distribution

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**Abstract**— A ration system that is used for public supply method i.e. allotment supply is one of the broad debatable issues which calls for corruption and black-market importing of goods. This occurs as a consequence of each task within the ration appearance involves manual function and also there are not any particular high-tech technology to modify the job. A conducive to intervention of guide function there square step several criminality occurs like incorrect entry in sign of appearance concerning the number of merchandise that contributed to the people, typically there is likelihood of supply of inferiority merchandise than real product given by authorities for poor people, people do not have plan regarding what amount of outstanding provided by authorities to them etc. We have an inclination to suggest the build on the verge of substitute manual incorporate public supply method (rationing distribution platform).E-government has been enforced in other regions of presidency government for each of the native and federal levels globally. E-rationing method may reduce corruption from ration retailers. In Online registration user may fill his private data and household information in program. Whenever prior to doubles variety, the authorized person must bear the confirmation component. After confirmation is completed, quantity that he can accumulate also logged to the computer system. So not solely untrue and credit card ration variety is averted however in a comparable time an appropriate log of quantity however merchandise non-inheritable from the cardboard holder too will half-tracked.

**Key words:** E-Rationing System, PDS, ICT

## I. INTRODUCTION

Ration card might be a very necessary record for every discipline in Asian Countries. Card is utilized to purchase varied essential things like: oil, sugar etc. against the majority of retailers in a more affordable rate, issued from the govt. This card also functions as address further as identity evidence. Card is necessary as soon as you make an application for passport, PAN number, license etc. Therefore, card could be a significant document. However, this card system encircles a drawback, that when the items do not appear to get sold as much as the past of this month, after which the tradesman could sell it to someone else and choose the gain into his pocket and then put some bogus reading inside the government document journal. Public Distribution System (PDS) is connect level Indian food safety system. It is created from the government of Asian country under Ministry of shopper Affairs, Food, and Public Distribution and handled together with state governments in Asian country. The typical PDS is used to disperse supermarket items to India's poor World Health Organization are legitimate card holders. The validity and so the allocation of these ration cards is tracked by the state authorities. A card holder needs to incline half an pounds unit of foodstuff in accordance with the standards of PDS. However, there are

factors concerning the effectiveness of this distribution technique. In order to make it economic and enhance this method. Manipulation in this process, the card holder will probably acquire his/her grocery store items from the fair worthiness Shop's . The main reason for manipulation in the process will be to prevent the issues such as reproduction of cards Forgery in action meals materials.

## II. PROBLEM STATEMENT

Now a days identity card is extremely vital for each home and it's employed in varied fields like relations details. It acts as associate address proof for varied functions etc. All the folks having an identity card can purchase the assorted materials (sugar, rice, oil, kerosene, etc) from the ration retailers. There is an opportunity for the black usage of our product within the regular system, i.e. the materials are robbed by creating wrong entries within the register while not the insight of the identity card holder. As a result of that giant quantity of cash given by government gets wasted.

## III. LITERATURE SURVEY

According to literature after studying various papers by, collecting some related papers few highlighted points are described here:

### A. Smart Ration Card

#### 1) Author: Mrs. B. Buvanewari

The Ration search cannot able to meet the requirement of the user because of over population of our country, so the method speed is low. As a result, there is invariably crowd of people at intervals the ration search. to boot there is a chance for the bootleg usage of proposed product at intervals the regular system, i.e. the materials area unit robbed by making wrong entries at intervals the register whereas not The insight of the positive identification holder. Because of that big amount of money given by government gets wasted. Hijacking is that the most draw back at intervals the user positive identification. Hence, Author has developed a smart positive identification application for all automation mobile users.

### B. Web Enabled Ration Distribution and Corruption Controlling System

#### 1) Authors: Dhanashri Pingale, Sonali Patil, Nishigandha Gadakh, Reena Avhad, Gundal S.S

Corruption has been around for an awfully sturdy and keep at intervals the long run unless governments will recognize effective ways in which to combat it (Mauro 1997). E-government is additional and additional accustomed improve transparency at intervals the govt. sector and to combat against corruption .E-government is being implemented in extra areas of presidency administration for every the native and national levels worldwide. E-government system developed to shop back corruption. The aim of this paper is to arrange and summarize existing theoretical and empirical

work on corruption with a browse characteristic opportunities for any analysis. Mechanization can facilitate in modernizing the PDS. The southern states as was common have LED the approach on many reforms purported to upset the issues beyond, and additional and additional even poorer states have introduced changes in policies and implementation mechanisms to upset the problems of PDS. This paper discusses strategy tailored in exploitation ICT to manage diversion and outflow at intervals the delivery mechanism and its victorious application in mechanization of grain provide chain. As Associate in Nursing outcome of the project, 0.78 Million farmers have received portable computer generated cheques with none delay. Subject involvement at intervals the system has been raised in observation PDS.

### C. Web-Enabled Ration Distribution and Controlling

1) Authors: Neha Pardeshi , Trupti Desale, Prajakta Bhagwat, Ruchali Ahire

E-government is additional and additionally being utilized to reinforce transparency at intervals the government sector and to combat corruption. A well-planned e-government strategy can build plenty of economical, accountable and clear government. Initially analyze the theoretical background of anti-corruption strategy that illustrates the advantages of e-government services. Any samples of e-government where corruption was significantly reduced and attracts lessons on leadership and group action issues in deploying information and communication technology (ICT) to combat corruption. To boot, enable United States of America to debate the e-government as Associate in nursing anti-corruption strategy in Asian nation and imply the imperative tasks for good e-government in Republic of India. Finally, enable United States of America to investigate some challenges to the event of the e-government system and its existing problems. Here efforts from facet square measure done to beat one in all the corruption draw back involve in ration distribution system through a form of electrodynamics net where distribution of fuel, rice, wheat etc. at rural and concrete areas, are checked, monitored and controlled with filtering the matter of corruption and adulteration.

### D. Automatic Rationing for Public Distribution System (PDS) using RFID and GSM Module to Prevent Irregularities.

1) Author: Rajesh C. Pingle and P. B. Borole

Public distribution system i.e allocation distribution is one in each of the wide polemic issue that involves corruption and illegitimate importation of merchandise. One reason of this to happen is as a results of every job at intervals the ration look involves manual work and there is no specific technology involved in automating the work. Involvement of manual work calls an ample irregularities. These irregularities or illegitimate activities are as associate degree example - wrong entries obtainable register of look containing wrong stock information of the merchandise that is provided to the final public, typically there square measure likelihood of distribution of low quality/graded merchandise than the actual merchandise provided by the government. For activity to the final public, to boot the information regarding the actual out there stock quantity throughout a ration look that is

provided by the government. To the final public. It has propose the concept of replacement manual work/job in public distribution system; rationing distribution system in India; by automated system which could be place in at the ration look with ease. An automated system an inclination to interchange the normal card by open-end credit at intervals that all the little print relating to users square measure provided in conjunction with their AADHAR (social security) vary that is used for user authentication. This prompted North American nation to interface open-end credit reader (RFID Based) to the microcontroller (AT89C51) and portable computer via RS232 to develop such a system. Exploitation such a system, Government would have all required control/monitoring over the transactions at ration look. To involve Government at intervals the tactic has been introduced.an inclination to projected connecting the system at ration look to a central information (provided by Govt.) via GSM module (SIM900D) and RS232. So it's possible to prevent the corruption and irregularities at ration look. This might bring the transparency in public distribution system as there will be a direct communication between people and Government through this.

## IV. PROPOSED SYSTEM

Classification of card kind victimization KNN mistreatment details apply KNN algorithm for numerous attributes like no. of members of the family, gain provide, annual gain, cast and classify matching form of card as per government protocols. Verification the time of distributing ration to voters to verify identity of each national and quantity of assigned ration to that national victimization OTP (one time password) send to national registered mobile no. New application for card national ought to fill the most points among the sort like: - name, contact no., address, annual gain, cast, provide of monetary gain, criticism national may complain with reference to service, quantity, quality, and distribution of ration.

## V. SYSTEM DESIGN

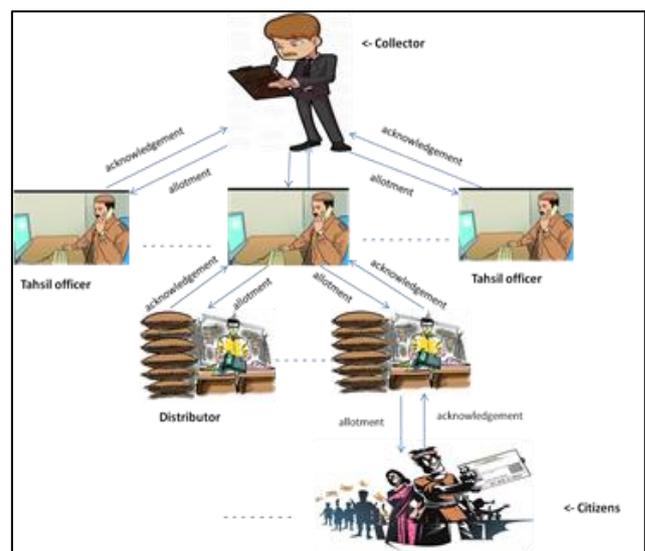


Fig. 1: System Design

## VI. ADVANTAGES

- Avoid corruption
- Record store
- Keep status
- Complaint taking into consideration

### A. Application

- Government Ration Shops
- Automated ration distribution system
- e-public distribution monitoring system

## VII. ALGORITHM

### A. Algorithm: Knn

- 1) Verify parameter K = range of nearest neighbors
- 2) Calculate the gap between the query-instance and every coaching samples
- 3) Find the gap and verify nearest neighbors supported the K-th minimum distance
- 4) Gather the class Y of the closest neighbors
- 5) Use straightforward majority of the class of nearest neighbors because the prediction price of the question instance.

## VIII. MATHEMATICAL MODEL

Let S is the Whole System Consist of

- $S = I, P, O$
- $I = Input$
- $I = U, A$
- $U = User$
- $U = \{u_1, u_2, u_n\}$
- $A = Administrator$
- Let  $U_1, U_2, \dots, U_n$  be the set of users, providing the registration and getting allotted material. After verify the registration id, access will be given to the specified quantity of the material to the respective user.

Administrator will update the information regarding the material taken by the users.

### A. Output:

Output as per provided input

## IX. HARDWARE REQUIREMENT

- System Processor : Core2Duo
- Speed : 2.4 GHz
- Hard Disk : 150 GB

## X. RESULT ANALYSIS

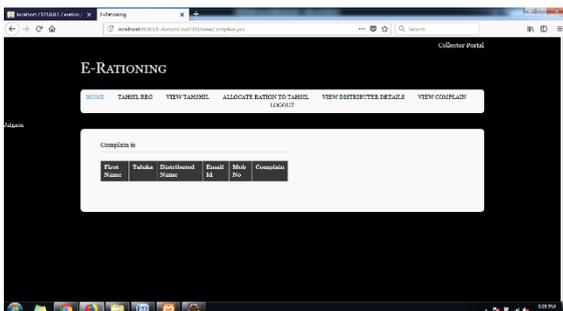


Fig. 2: View complain of citizen

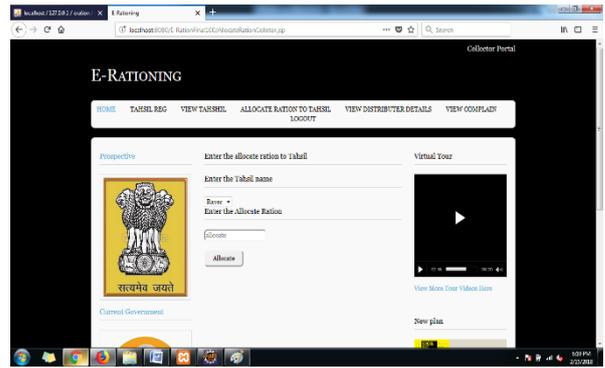


Fig. 3: Allocate ration

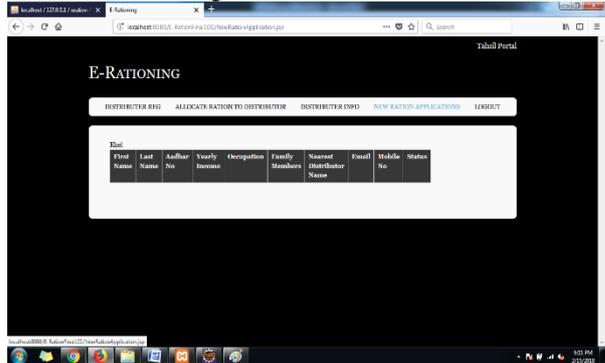


Fig. 4: New applicant registration form

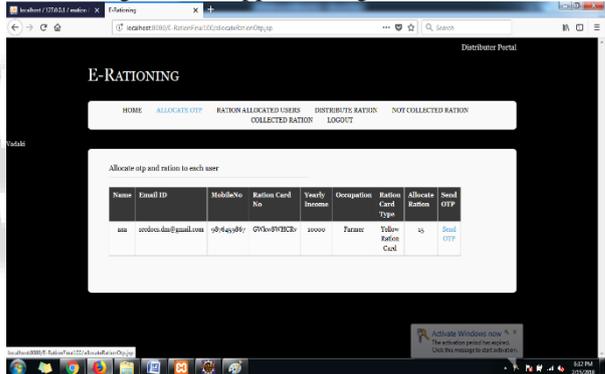


Fig. 5: OTP send to user

## XI. CONCLUSION

The E-rationing unit has few drawbacks at intervals the prevailing system, like all the information is handled manually and there is no technology involved at intervals the system. Second if the materials do not appear to be bought at the tip of month, then they're going to sell without intimation to customers and government. We have proposed the system to overcome these drawbacks. Verification the time of distributing ration to voters to verify identity of each national and quantity of assigned ration to that national victimization OTP(one time password) send to national registered mobile no. this process will be to prevent the issues such as reproduction of cards Forgery in action meals materials.

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