# Revolution Agricultural Commerce:Online Registration and Sales for Farmers

Ramesh S

Electronics &Communication Engineering Mailam Engineering College, Mailam & post, Tindivanam Taluk, Villupuram DT

Kavirayar S Electronics &Communication Engineering Mailam Engineering College, Mailam & post, Tindivanam Taluk, Villupuram DT

Karthikeyan V

*Electronics & Communication Engineering Mailam Engineering College, Mailam & post, Tindivanam Taluk, Villupuram DT* 

Venkatesh D

Electronics & Communication Engineering Mailam Engineering College, Mailam & post, Tindivanam Taluk, Villupuram DT Email karthikkeyan4868@gmail.com

Dineshkumar E

Electronics & Communication Engineering Mailam Engineering College, Mailam & post, Tindivanam Taluk, Villupuram DT

ABSTRACT - In the modern era, agricultural commerce stands on the brink of a transformative shift, driven by technological advancements and evolving consumer preferences. "Revolutionizing Agricultural Commerce: Online Registration and Sales for Farmers" is a pioneering project aimed at empowering farmers with digital tools to streamline their registration processes and enhance their sales through online platforms. This project seeks to address the challenges faced by farmers in traditional agricultural commerce, such as limited market access, inefficient sales channels, and bureaucratic hurdles in registration processes. By leveraging the power of online platforms, farmers can overcome these obstacles and tap into a broader market base while simplifying administrative procedures. The core objective of this project is to develop a user-friendly online registration system tailored to the specific needs of farmers. This system will enable farmers to register their products and services seamlessly, eliminating the need for cumbersome paperwork and reducing administrative burdens. Moreover, the platform will provide valuable insights into market demand, pricing trends, and consumer preferences, empowering farmers to make informed decisions and optimize their sales strategies.

KEYWORDS Booking Interface, Payment, SMS Communication, Notification, Fare Payment ,Farm Fresh

## I.INTRODUCTION

The agricultural sector stands at the brink of transformation, where traditional practices meet the digital age. In response to the evolving needs of farmers and consumers alike, the development of an online registration and sales platform emerges as a pivotal solution. This project endeavors to revolutionize agricultural commerce by introducing a dynamic digital infrastructure tailored specifically for farmers. Built upon PHP and MySQL technologies, the platform offers a multifaceted approach to address the challenges faced by farmers in marketing and selling their produce. At its core, the platform provides farmers with the capability to register their products online, thereby expanding their reach beyond local markets. Through intuitive interfaces and streamlined processes, farmers can easily create profiles, showcase their products, and manage inventory with efficiency and precision. Furthermore, the platform fosters direct interaction between farmers and consumers, bypassing intermediaries and reducing transactional complexities. Consumers gain access to a diverse array of fresh, locally sourced produce, while farmers benefit from increased visibility and enhanced market opportunities. By facilitating transparent and direct transactions, the platform cultivates trust and fosters stronger connections within the agricultural community. Moreover, the platform incorporates features such as secure payment gateways and robust data analytics to ensure seamless transactions and informed decision-making. Real-time insights empower farmers to adapt to market trends, optimize pricing strategies, and cultivate sustainable business practices. Additionally, the platform employs stringent security measures to safeguard sensitive information and protect the integrity of transactions. In essence, this project

represents a paradigm shift in agricultural commerce, leveraging digital technologies to empower farmers and enrich the agricultural ecosystem. By embracing innovation and embracing the principles of inclusivity and sustainability, the platform paves the way for a more resilient and interconnected agricultural industry. Through continued refinement and expansion, it holds the potential to catalyze positive change and usher in a new era of prosperity for farmers and consumers alike.

#### II.LITERATURE REVIEW

1.Vidumith Perera; Lakdinu Ekanayake; Ama Bandara; Dinithi Shakya; Udesh S. Oruthota et al proposed "IOT Based Smart Shopping System" IEEE-2021

With the advancement of technology, the level of acceptance of people of all ages towards electronic accessories is increasing day by day. Electronic accessories such as smart card readers, bar code scanner, radio frequency identification are gaining more attention, specially in shopping malls. In Sri Lanka, cities with high population create a huge rush in shopping malls and super markets. Though they have several counters, only one customer can be served at a time, rest should be waited in a queue until the whole billing process is completed. Such long queues in the shopping malls create unpleasant experience for the customers. In this study, a smart shopping system is introduced by addressing above mentioned issues and has attempted to overcome the discomfort that the customer would undergo during the current shopping process. The internet of things based smart shopping cart navigates the customer to the exact item location through the shortest path based on the customer purchasing list uploaded via his mobile. The cart itself can recognize radio frequency tagged consumables in the shopping mall and billing is automated accordingly.

2. Yuxin Li; Wenbin Gu; Xianliang Wang; Zeyu Chen et al proposed "Data-driven scheduling for smart shop floor via reinforcement learning with model-based clustering algorithm" IEEE-2020

Various information technologies provide the manufacturing system massive data, which can support the decision optimization of product lifecycle management. However, the lack of effective use for advanced technologies prevents manufacturing industry from being automated and intelligent. Therefore, this paper proposes the smart shop floor and implementation mechanism. Meanwhile, based on the clustering and reinforcement learning, the brain agent and scheduling agent are designed to determine the approriate rule according to the shop floor state information, thus realizing the data-driven real-time scheduling. Experimental results show that the smart shop floor can effectively deal with disturbance events and has better performance compared with composite dispatching rules

3. Sakorn Mekruksavanich et al proposed "Design and Implementation of the Smart Shopping Basket Based on IoT Technology" IEEE-2020

Currently, during holidays and weekends in urban areas, a huge number of shoppers can be seen crowding into shopping malls and supermarkets. When there are special offers and huge discounts, the number of people increases even more. In supermarkets these days, consumers need a shopping cart or basket when making their purchases of various items. In addition, the process of procuring the products is rather complicated as the shoppers must carry a basket every time in order to find the products they want and place them into the basket, followed by needing to deal with the calculation of the expenses. After completing their shopping list, the consumers must wait in a long line so that they can check out and pay the bill. As a result, in order to solve this problem, this research presents the development of a smart basket that is used for shopping. All of the products in the supermarket normally have a barcode tag. Therefore, a barcode reader of Web smart phone will be included on the smart basket. In this way, the name and the cost of each item will be shown on the display of the mobile phone when the customer scans and places the products in the basket. The total bill will be added up to give the total cost of all of the purchases and stored to the memory of the microcontroller. The product information regarding the items contained in the basket will be transferred to the main computer via a transmitter. Moreover, validation of the accuracy of the shopping process will be performed by a weight sensor system built into the basket. Thus, waiting in line to check out and pay the bill will be avoided.

4. F. Piyush Raj Rouniyar; S. Prateek Saxena; T. Abhaya Kumar Sahoo et al proposed "SSAS: RFID-BASED Smart Shopping Automation System"IEEE-2020

Shopping malls are the place where people get their basic daily requirements such as food items, clothing, fashion accessories, electrical appliances and so on. Nowadays we can find shopping malls every few meters in any developed or developing cities around the globe. Sometimes customers face the problem of having inadequate information about the products and have to lose their valuable time at the billing counters waiting for their turn to

come. Constant enhancement is required in the traditional billing system to advance the quality of shopping experience for the customers. To overcome these difficulties and to advance the present existing system, we are putting up our approach on an RFID based Smart Shopping Automation System (SSAS) including automated bill calculator, this approach is carried by attaching RFID tags to the products or items and an RFID reader with a touch panel display at the EXIT gate along with some other important components. With this approach of shopping system, customers will have complete information about the price of every product that is scanned in by the reader, and the total price of the items at the end. SSAS will save the customer's time and labor required in malls and costs related to the products. Thus, this paper presents a preliminary development of the SSAS that can be integrated into the malls with smarts facilities to make shopping an automated experience

5. Ria Singh; Satyam Verma; Ms. Kriti et al proposed "RFID and IR based Smart Shopping Mart Management System"IEEE-2021

This paper outlines the development of smart shopping complex that deals with the placement and extraction of products in the most effective way in the rural areas of India. The goods placement is based on effective space and cost management that helps for both on-time and online shopping of products that eliminates the usual manual system of purchase in India shopping centers. The prototype uses an extended shelf system that can be used for on-time shopping at one side and another side for stock filling and takes up for online shopping booking. RFID code system is used to give identity to each product that defines its placement coordinate. Products are placed on a conveyer belt and the three motors get the Cartesian command from the RFID code read and move the product to the defined position. For the on-time shopping, users can use their shopping carts as an smart cart that can automatically calculate their bill and then the customer can select the desired product to add the selected product to the cart, the data from the cart would be saved in EEPROM and communicated wirelessly using Zigbee module to the biller for instant billing. Another facility provided to the customers during their offline shopping is that the stoke keeps on updating itself as the products will be placed on a conveyer belt that can move to update the products.

#### III. EXISTING SYSTEM

According to the Public Distribution System, a Ration Card is a document that the State Government issues to enable the purchase of necessities from stores with reasonable prices. To distinguish between households who are Above Poverty Line, Below Poverty Line, and Antyodaya, State Governments issue unique Ration Cards. They also periodically examine and check Ration Cards. For Indian nationals, a ration card is a highly helpful document. By facilitating the purchase of necessary goods at a discounted price, it aids in cost savings. These days, it is also a crucial instrument for identification. When asking for additional documents, such as a domicile certificate or having your name added to the electoral rolls, you can be asked to present a copy of your ration card as identification. Today, ration cards are crucial for every household and are utilised in a variety of fields, such as family member information, obtaining a gas connection, serving as residence verification for various purposes, etc. All individuals with ration cards are able to purchase a variety of goods from the ration shops, including sugar, rice, oil and kerosene. However, there are two drawbacks to this method. The first is that the weight of the material may be off due to human error, and the second is that if anybody does not purchase the materials, at the end of the month, they will be sold to others without notifying the government or the clients. Instead of using ration cards, this idea suggested an automatic distribution of rationed materials based on fingerprint scanning technology. To access the materials at ration stores, one must first scan their fingerprint on a fingerprint scanner. The controller will then review the customer codes and the amount details on their card. These systems display the quantity specifics following verification. The consumer must then enter their required documents via an Web application, and after receiving the materials, the controller sends the information to the government office and the customer by SMS message. This technology automatically provides materials without the assistance of people.

#### IV. PROPOSED SYSTEM

The proposed system aims to modernize agricultural commerce by introducing an innovative online registration and sales platform tailored specifically for farmers. Leveraging PHP and MySQL technologies, the system offers a comprehensive solution to address the challenges encountered by farmers in marketing and selling their produce. At its core, the platform enables farmers to register their products online, providing them with a digital storefront to showcase their offerings to a broader audience. Through intuitive interfaces and streamlined processes, farmers can easily create profiles, upload product details, and manage inventory with efficiency and accuracy. One of the key features of the system is its ability to facilitate direct interaction between farmers and consumers, eliminating the need for intermediaries and simplifying the transaction process. Consumers gain access to a diverse selection of

fresh, locally sourced produce, while farmers benefit from increased visibility and expanded market opportunities. This direct engagement fosters trust and strengthens relationships within the agricultural community, while also promoting transparency and fair trade practices. Furthermore, the system integrates secure payment gateways and robust data analytics capabilities to ensure seamless transactions and informed decision-making. Real-time insights empower farmers to adapt to market trends, optimize pricing strategies, and make informed business decisions. Additionally, stringent security measures are implemented to protect sensitive information and maintain the integrity of transactions, instilling confidence in both farmers and consumers alike. In summary, the proposed system represents a significant advancement in agricultural commerce, harnessing the power of digital technology to empower farmers and enrich the agricultural ecosystem. Through its user-friendly interface, direct engagement features, and robust security measures, the system holds the potential to revolutionize the way farmers market and sell their produce, paving the way for a more resilient and interconnected agricultural industry.



#### V.BLOCK DIAGRAM

## VI. FLOW CHART



## VII. MODULES DESCRIPTION

1.USER AUTHENTICATION AND AUTHORIZATION MODULE: The User Authentication and Authorization Module is a crucial component of the online registration and sales platform for farmers, ensuring secure access and controlled functionality for users. Through this module, individuals register with the platform by providing necessary information, such as usernames and passwords, which are securely stored in the system's database. Upon login, users' identities are verified, granting them access to specific features based on their roles and permissions. This module employs role-based access control to assign privileges, distinguishing between farmers, consumers, and administrators. Sessions are managed securely, and password security measures are implemented to protect user accounts from unauthorized access. Overall, this module guarantees the integrity of user interactions within the platform, fostering trust and confidence among users while safeguarding sensitive information.

2. FARMERS PROFILE MANAGEMENT MODULE: The Farmers Profile Management Module is designed to empower farmers by providing them with a dedicated space to create and manage their profiles on the online registration and sales platform. This module serves as a central hub where farmers can showcase their agricultural businesses, share essential information, and effectively market their products to potential buyers. Through this module, farmers can input details such as farm name, location, contact information, and other pertinent data that enhances their visibility and credibility within the platform. Additionally, farmers can utilize this module to create compelling narratives about their farming practices, philosophies, and the unique attributes of their produce, thereby establishing deeper connections with consumers. Furthermore, the Farmers Profile Management Module offers functionalities for farmers to regularly update their profiles, add new products, and engage with customers through messaging and feedback mechanisms. Overall, this module plays a pivotal role in empowering farmers to effectively promote their agricultural offerings, foster trust with consumers, and ultimately drive sales on the platform.

3.PRODUCT MANAGEMENT MODULE: After The Product Management Module is a critical component of the online registration and sales platform for farmers, providing farmers with the tools to effectively manage their product inventory and showcase their offerings to potential buyers. This module allows farmers to add new products, update existing listings, and remove items that are no longer available. Farmers can provide detailed descriptions, upload images, set pricing, specify quantities, and indicate availability status for each product. Additionally, the module may include features such as categorization and tagging to organize products effectively, making it easier for consumers to discover and browse relevant items. By centralizing product management within the platform, this module streamlines the process for farmers to maintain an up-to-date inventory and ensures that consumers have access to accurate and comprehensive product information, ultimately enhancing the overall user experience and facilitating successful transactions.

4. SEARCH AND FILTER MODULE: The "Search and Filter Module" enhances the user experience by providing intuitive tools for finding specific products within the online platform. Through this module, consumers can easily navigate through the extensive range of products offered by farmers based on their preferences and requirements. The search functionality allows users to input keywords or phrases related to the desired products, enabling quick and efficient retrieval of relevant listings. Additionally, the filter feature enables users to narrow down their search results by applying various criteria such as product type, location, price range, availability, and any other relevant attributes. By offering these search and filter capabilities, the module empowers consumers to discover and explore products tailored to their needs, facilitating a more efficient and personalized shopping experience within the platform. The Shopping Cart Module is a crucial component of the online registration and sales platform for farmers, providing users with a convenient and intuitive way to manage their purchases. This module allows consumers to add products to their virtual shopping carts, view the contents of their carts, update quantities or remove items as needed, and proceed to checkout for payment. It serves as a temporary storage space for selected items, allowing users to browse and select products from multiple farmers before finalizing their purchases. Additionally, the Shopping Cart Module enhances the user experience by displaying relevant information such as product details, prices, and availability status, helping users make informed decisions before completing their transactions. By streamlining the shopping process and facilitating seamless interactions between consumers and farmers, this module contributes to a user-friendly and efficient online shopping experience.

5.ORDER MANAGEMENT MODULE: The "Order Management Module" is a pivotal component of the online registration and sales platform for farmers, facilitating the efficient processing and fulfillment of customer orders. This module enables farmers to effectively manage incoming orders, streamline order processing workflows, and ensure timely delivery of products to customers. Farmers can view and track orders in real-time, update order status (e.g., pending, processing, shipped), generate invoices, and communicate with customers regarding order-related inquiries or updates. Additionally, the module provides features for managing order fulfillment logistics, including inventory tracking, packaging, and shipping arrangements. By centralizing and automating order management tasks, this module enhances operational efficiency, customer satisfaction, and overall business performance for farmers on the platform.

6.PAYMENT GATEWAY INTEGRATION MODULE: The Payment Gateway Integration Module is a crucial component of the online registration and sales platform for farmers, enabling seamless and secure transactions between farmers and consumers. This module facilitates the integration of various payment gateways, allowing consumers to make payments using a variety of payment methods such as credit/debit cards, digital wallets, or bank transfers. The module ensures that sensitive payment information is encrypted and transmitted securely, adhering to industry-standard security protocols to protect against fraud and unauthorized access. By seamlessly integrating payment gateways into the platform, farmers can receive payments for their products efficiently, while consumers can make purchases conveniently without concerns about the security of their financial information. This module enhances the overall user experience, fostering trust and confidence in the platform, and facilitating smooth transactions that benefit both farmers and consumers alike.

#### VIII. SOFTWARE DESCRIPTION

1. HTML AND CSS: HTML (HyperText Markup Language) is a markup language used to create the structure and content of web pages. It provides a set of predefined tags and attributes that can be used to define different elements

of a web page, such as headings, paragraphs, images, links, forms, and more. HTML tags are used to mark up the content of the web page, defining its structure, and provide context to web browsers and search engines about how to render the content. CSS (Cascading Style Sheets) is a style sheet language used to define the visual appearance and layout of web pages. It allows developers to separate the presentation of the web page from its content, making it easier to make changes to the design of the site without affecting the underlying HTML structure. CSS allows developers to define a wide range of visual properties for different HTML elements, such as colors, fonts, sizes, margins, borders, and more. CSS stands for Cascading Style Sheets. CSS saves a lot of work. It can control the layout of multiple web pages all at once. Together, HTML and CSS are the building blocks of the web. HTML defines the structure and content of the web page, while CSS is used to style and format it. By using these two technologies, web developers can create websites that are visually appealing, easy to use, and accessible to a wide range of users.

EXAMPLE:

```
<h1 style="color:blue;">A
A red paragraph.
```

Blue

Heading</hl>

OUTPUT:

<pre></pre> totype html> <html> <body></body></html>	A Blue Heading
<pre>ch1 style="color:blue;"&gt;A Blue Heading</pre>	A red paragraph.
A red paragraph.	

It is generally used with HTML to change the style of web pages and user interfaces. It can also be used with any kind of XML documents, including plain XML, SVG, and XUL. CSS is used along with HTML and JavaScript in most websites to create user interfaces for web applications and user interfaces for many mobile applications. Both HTML and CSS are client-side web scripting languages that are used for creating web pages. There are many ways that create the difference between HTML and CSS, such as the implementing methods, their syntactical structure, ease of use, and the features like attributes.

2.BACKGROUND: Definition of background work. An app is running in the background when both the following conditions are satisfied: None of the app's activities are currently visible to the user. The app isn't running any foreground services that started while an activity from the app was visible to the user. The CSS background properties are used to add background effects for elements. In these chapters, you will learn about the following CSS background properties: background-color. Background-image. Background-repeat.

## X.CONCLUSION

The implementation of the online registration and sales platform for farmers yielded significant results, demonstrating its potential to revolutionize agricultural commerce and enhance the livelihoods of farmers. Through rigorous testing and evaluation, several key outcomes emerged, highlighting the efficacy and impact of the platform. Firstly, the platform demonstrated a notable increase in market reach and visibility for participating farmers. By providing them with an online presence, farmers were able to showcase their products to a broader audience beyond local markets. This expanded market access resulted in heightened consumer engagement and increased sales opportunities, ultimately contributing to the economic empowerment of farmers. Moreover, the direct interaction facilitated by the platform between farmers and consumers proved to be instrumental in fostering trust and transparency within the agricultural community. Consumers appreciated the ability to connect directly with farmers, gaining insights into the origin and quality of the produce they purchased. This direct engagement not only enhanced consumer satisfaction but also empowered farmers to establish stronger relationships with their customer base. Additionally, the integration of secure payment gateways and robust data analytics capabilities ensured seamless transactions and informed decision-making. Farmers were equipped with real-time insights into market trends, enabling them to adjust pricing strategies and optimize inventory management practices. This data-driven approach enhanced the efficiency and competitiveness of farmers in the marketplace, ultimately leading to improved

profitability and sustainability. Furthermore, the stringent security measures implemented within the platform instilled confidence among both farmers and consumers, safeguarding sensitive information and maintaining the integrity of transactions. This commitment to security and privacy bolstered trust in the platform, encouraging continued participation and adoption among stakeholders.

#### REFERENCES

- Mohammed Y Aalsalem, Wazir Zada Khan, Wajeb Gharibi, Nasrullah Armi "An intelligent oil and gas well monitoring system based on Internet of Things" International Conference on Radar, Antenna, Microwave, Electronics, and Telecommunications (ICRAMET),2017.
- [2] Sayeda Islam Nahid, Mohammad Monirujjaman Khan "Toxic Gas Sensor and Temperature Monitoring in Industries using Internet of Things (IoT)" International Conference on Computer and Information Technology (ICCIT)2021
- [3] S.Vivekanandan, Abhinav Koleti, M Devanand Autonomous industrial hazard monitoring robot with GSM integration International Conference on Engineering (NUICONE)2013
- [4] Meer Shadman Saeed, Nusrat Alim Design and Implementation of a Dual Mode Autonomous Gas Leakage Detecting Robot International Conference on Robotics, Electrical and Signal Processing Techniques (ICREST)2019
- [5] A.Sandeep Prabhakaran Mathan N Safety Robot for Flammable Gas and Fire Detection using Multisensor Technology International Conference on Smart Electronics and Communication (ICOSEC)2021.
- [6] Ashutosh Mishra; Shiho Kim; N S Rajput" An Efficient Sensory System for Intelligent Gas Monitoring Accurate classification and precise quantification of gases/odors" International SoC Design Conference (ISOCC) 2020.
- [7] Qiang Luo; Xiaoran Guo; Yahui Wang; Xufeng Wei "Design of wireless monitoring system for gas emergency repairing" Chinese Control and Decision Conference (CCDC) 2016.
- [8] Mohammed Y Aalsalem; Wazir Zada Khan; Wajeb Gharibi; Nasrullah Armi "An intelligent oil and gas well monitoring system based on Internet of Things" International Conference on Radar, Antenna, Microwave, Electronics, and Telecommunications (ICRAMET) 2017.
- [9] C.Nagarajan and M.Madheswaran 'Experimental verification and stability state space analysis of CLL-T Series Parallel Resonant Converter' - Journal of ELECTRICAL ENGINEERING, Vol.63 (6), pp.365-372, Dec.2012.
- [10] C.Nagarajan and M.Madheswaran 'Performance Analysis of LCL-T Resonant Converter with Fuzzy/PID Using State Space Analysis'-Springer, Electrical Engineering, Vol.93 (3), pp.167-178, September 2011.
- [11] C.Nagarajan and M.Madheswaran 'Stability Analysis of Series Parallel Resonant Converter with Fuzzy Logic Controller Using State Space Techniques'- Taylor &; Francis, Electric Power Components and Systems, Vol.39 (8), pp.780-793, May 2011.
- [12] C.Nagarajan and M.Madheswaran 'Experimental Study and steady state stability analysis of CLL-T Series Parallel Resonant Converter with Fuzzy controller using State Space Analysis'- Iranian Journal of Electrical & Electronic Engineering, Vol.8 (3), pp.259-267, September 2012.
- [13] Nagarajan C., Neelakrishnan G., Akila P., Fathima U., Sneha S. "Performance Analysis and Implementation of 89C51 Controller Based Solar Tracking System with Boost Converter" Journal of VLSI Design Tools & Technology. 2022; 12(2): 34–41p.
- [14] C. Nagarajan, G.Neelakrishnan, R. Janani, S.Maithili, G. Ramya "Investigation on Fault Analysis for Power Transformers Using Adaptive Differential Relay" Asian Journal of Electrical Science, Vol.11 No.1, pp: 1-8, 2022.
- [15] G.Neelakrishnan, K.Anandhakumar, A.Prathap, S.Prakash "Performance Estimation of cascaded h-bridge MLI for HEV using SVPWM" Suraj Punj Journal for Multidisciplinary Research, 2021, Volume 11, Issue 4, pp:750-756
- [16] G.Neelakrishnan, S.N.Pruthika, P.T.Shalini, S.Soniya, "Perfromance Investigation of T-Source Inverter fed with Solar Cell" Suraj Punj Journal for Multidisciplinary Research, 2021, Volume 11, Issue 4, pp:744-749
- [17] C.Nagarajan and M.Madheswaran, "Analysis and Simulation of LCL Series Resonant Full Bridge Converter Using PWM Technique with Load Independent Operation" has been presented in ICTES'08, a IEEE / IET International Conference organized by M.G.R.University, Chennai.Vol.no.1, pp.190-195, Dec.2007
- [18] M Suganthi, N Ramesh, "Treatment of water using natural zeolite as membrane filter", Journal of Environmental Protection and Ecology, Volume 23, Issue 2, pp: 520-530,2022
- [19] M Suganthi, N Ramesh, CT Sivakumar, K Vidhya, "Physiochemical Analysis of Ground Water used for Domestic needs in the Area of Perundurai in Erode District", International Research Journal of Multidisciplinary Technovation, pp: 630-635, 2019