



## **FARMER TO CUSTOMER E-TRADE**

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**Abstract-** The main focused on web pages are developing and introducing new technology to interface the farmer to customer (f2ct) for increase the productivity and reduce the operating cost of the farmer. This method is provided to uplift the farmer's income and reduce the productivity cost of Farmer and also agricultural product cost to the consumer through electronic trade (e-trade). A website is created. It contains all the details of agricultural products of the farmers. The customer can buy it directly from the farmer by just ordering with a delivery address. If the customer is close by to the farmer, they can get the product by themselves else they have to get it through any logistics. By this way, the farmer can get the money exactly for the work they did and people also no need to pay extra money for the products. This mode of e -trade is very effective and helpful for both customers and farmers by the web site is f2ct.org.

**Keywords –** farmer, customer, e-trade, f2ct

### **1. INTRODUCTION**

In modern days, the accessing of electronic data has become very simple because of the rapid development of the Internet data through mobile stations. In other words, the e-commerce trading like B2B, B2C, C2C etc. are exponentially growing in terms of tens of trillions dollars. The cross boarder e trade also increasing in terms multi trillion dollars through internet [1]. The Alibaba and Walmart are world's largest retailers in business to business (B2B), B2C, P2P Or C2C [2]. The basic model B2C has turned into F2C model (Which gives products to customer) and C2B model (which is made from consumers), into C2F model (which make orders for goods in farm .Different types of logistics are used in B2C, F2C, C2F (such as availability of machine, seeds, fertilizers etc.) are mainly presented [3]. The protection of farmer not included in the existing trade models. To increase the benefits of the farmer the governments are introduced mobile apps. like uzhavan app(C2F), AgriMarket(F2C) ,etc. F2C survey was conducted and found more quality products expected by customer through on line for few 10 dollars [4]. In [5-6] Germany has high potential to get high quality organic produces with competent service, store atmosphere, helpfulness and friendliness of stuff. The chat option, guest login, multiple languages for the system making system more user friendly web portal was designed and shown different login such as Farmer login, Customer login, purchase login, product details and billing gateway [7]. Instead of paying a monthly fee for the Internet services required to host a web site or operate and e-commerce site, the business contracts with the commissioned e-commerce service provider to provide these services based on receiving a percentage commission of the commercial transactions generated using these services. Preferably, the commission percentage is tiered in accordance with the amount of traffic at the site to provide a nominal level of service at a lower commission rate [8]. After the study of last 20 years of e-commerce and e-trading the formers are not benefited as much as compared to Business people. So, It is proposed to add a direct marketing between former and customer through the different logistics and different modes of payment based on the customer satisfaction such as good quality, competitive price, less time to get the organic products, good cold chain logistics and high quality.

The rest of the paper is organized as follows. Proposed model to farmer e trade model in section I and functional blocks are explained in section II. Simulated outputs are in section III. Concluding remarks are given in section IV.



## 2. PROPOSED MODEL

### 2.1 Farmer to customer e trade model—

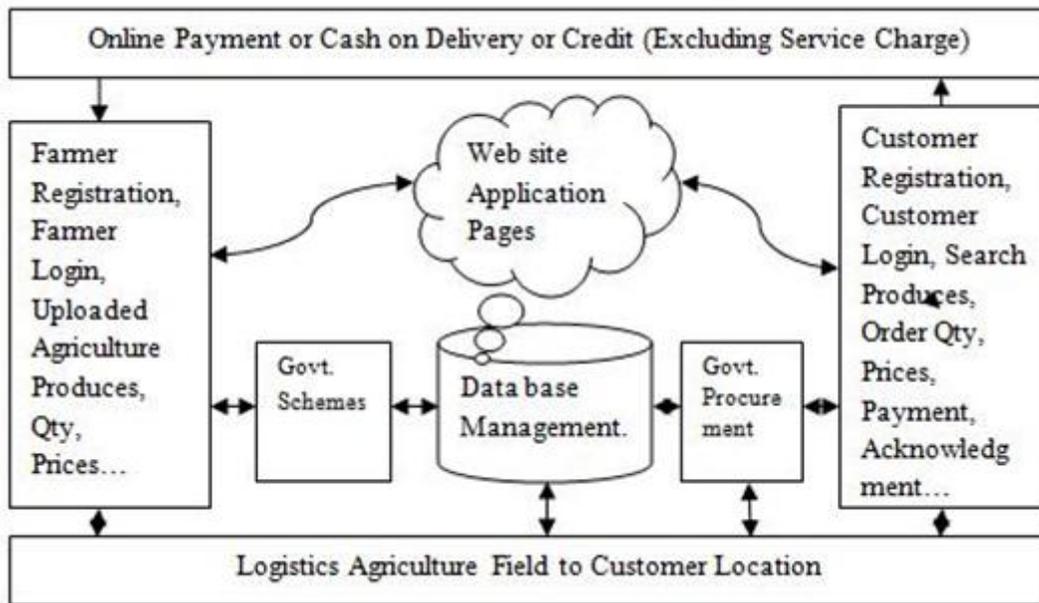


Figure 1. Farmer to customer e trade model block diagram

### 2.2 Proposed Method

A website is designed with a login page, farmer page, and customer page. The farmer and customer pages provide access to two different sites. The payment gateway, the logistics from Agricultural field to Customer location are to be incorporated to become full product to release in the market to realize the e- trade between the farmer and agriculture. The schemes announced by the government is also displayed . The generalized model is shown in the above Figure 1.

#### 2.2.1 Login Page

A login page has the username and password attributes. If a farmer wants to log in or signup, it can be done by providing the appropriate username and password. If the farmer is signing up, those values are stored in the database. If the farmer is log in, then it compares the entered value with the value in the database. It opens into a page only if both the things are matched. Similarly, everything is the same for the customer also.

#### 2.2.2 Farmer Page

Once the farmer signed up on this site, they have to give their personal details and the product details. Once this step is done, they are redirected to their profile in that site they can update or add any details about them. The personal details they have to give in the site such as name, age, phone number, address, the location of the crop field. They have to upload the details of the product such as the name of the product and its price. Actual distance in kilograms they have and the date of the cultivation. The schemes announced by the government for the welfare of the farmers are visible in the page called schemes provided by the government. The reviews and the comments they get from the customers will be displayed on their page.

#### 2.2.3 Customer Page

The customer page contains the personal details of them such as name, age, address, phone number, delivery location. There is another column called review block in that they can give their review about the particular product they about and the quality of the products yielded by the particular farmer. They can order the product which they want from the product column. It contains the details of the product along with the image and details of the farmer who cultivated the particular product.

#### 2.2.4 Transactions and Logistics Details

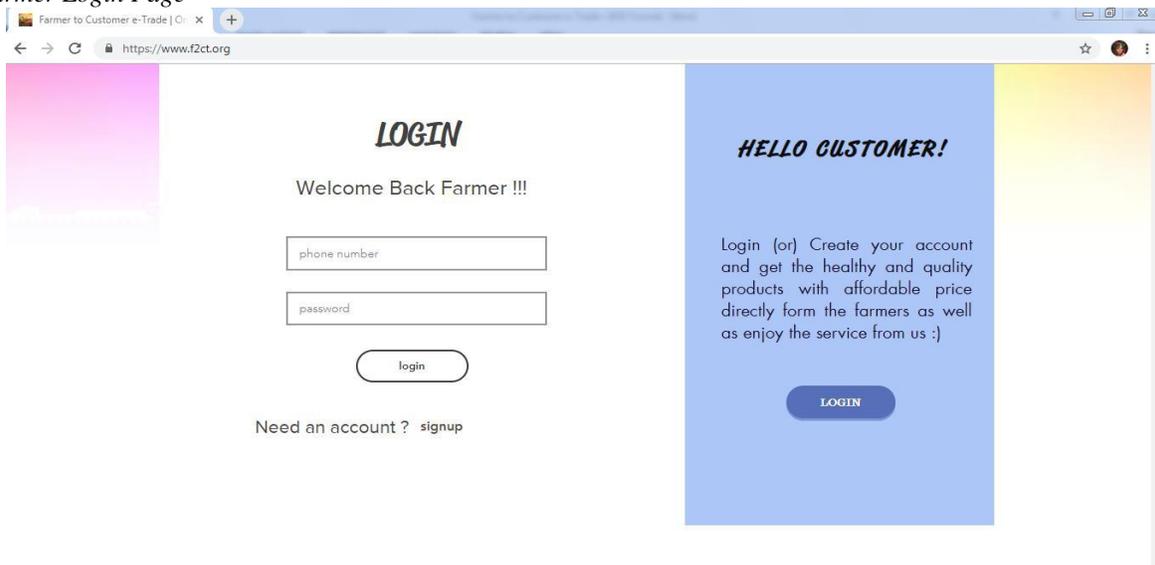
The products ordered in the customer page can be billed and the customer can pay the amount through online or they can give it as cash on delivery. Then if the customer can get the product by themselves then there is no need for the logistics else they can get the product delivery through any suggested logistics if service is made available for the particular location.

### 3. RESULTS AND DISCUSSIONS

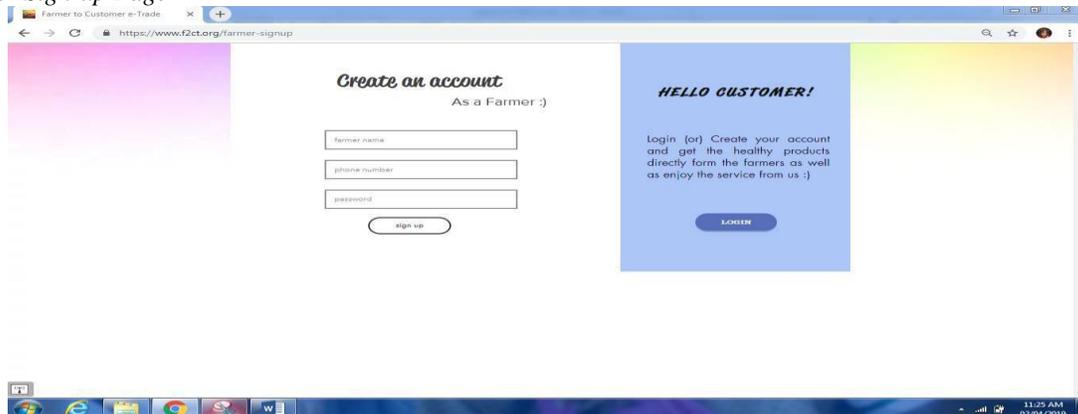
By implementing this into existence, both the farmer and the customer can gain more profit and it is easy to use and implement. No need for investment for the farmer. The database management system maintenance, Web transaction service charge, Logistics charges and online payment charges are only overhead cost to the consumer instead of market rate are illustrated in the following output Figures.

#### 3.1 Login Page:

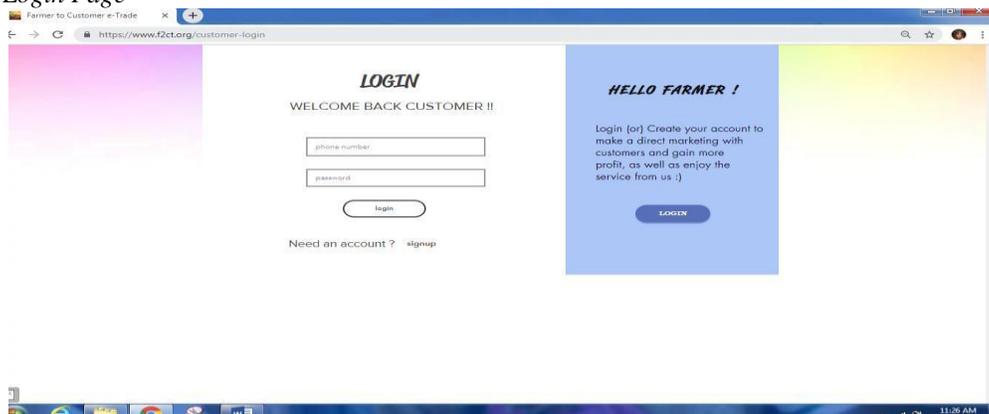
##### 3.1.1 Farmer Login Page



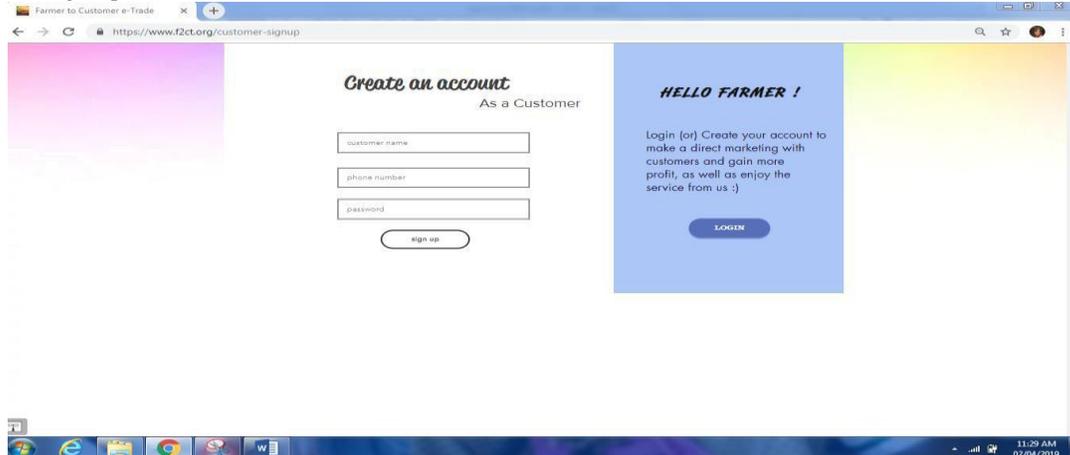
##### 3.1.2 Farmer Sign-up Page



##### 3.1.3 Customer Login Page

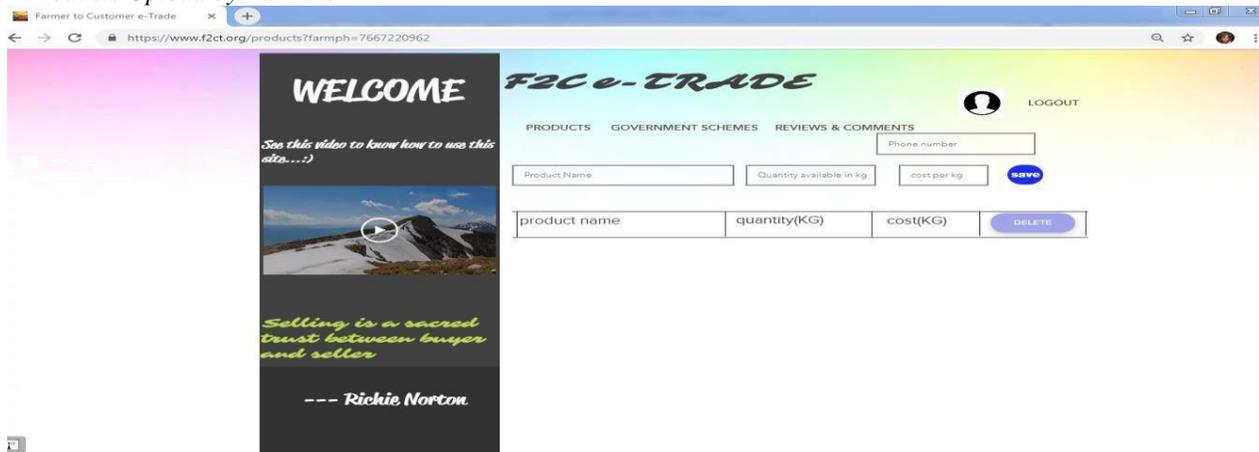


### 3.1.4 Customer Sign-up

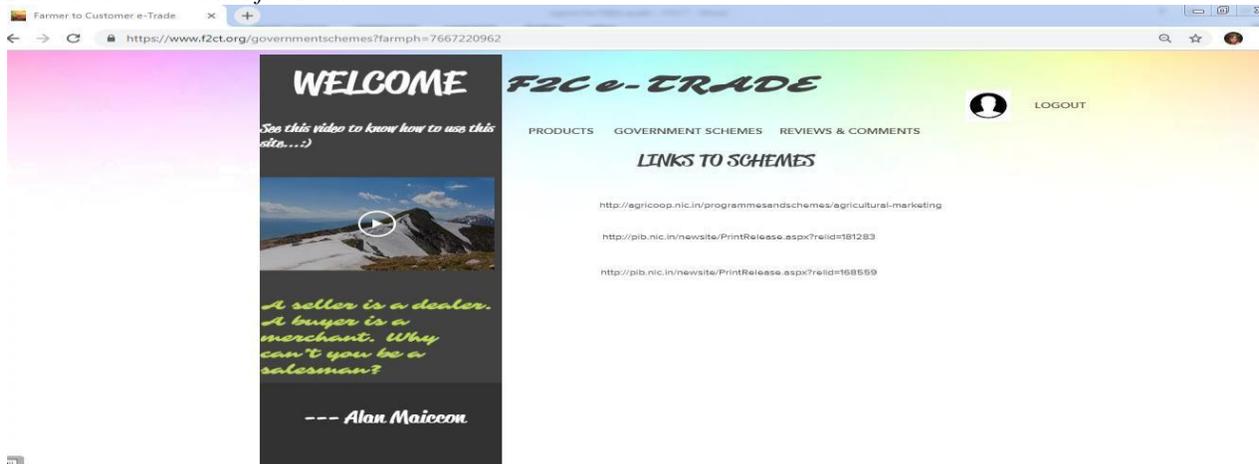


## 3.2 Farmer Page:

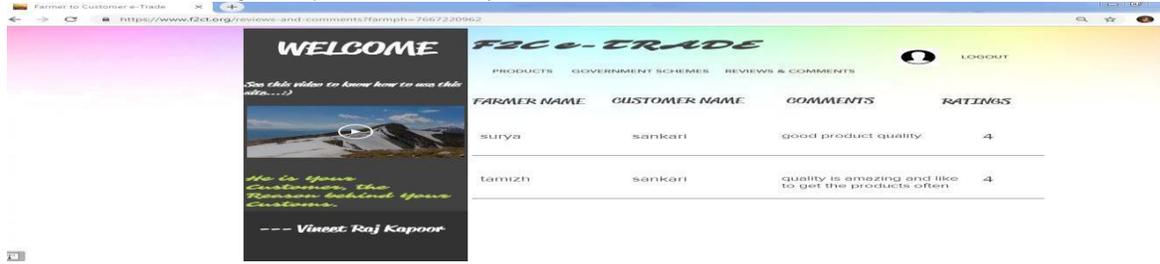
### 3.2.1 Products Upload by Farmers



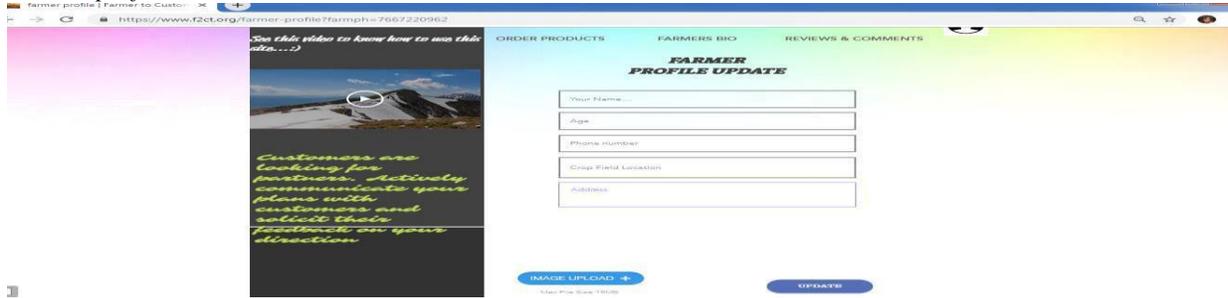
### 3.2.2 Government schemes for Farmer



3.2.3 Reviews and Comments given by the Customers for them

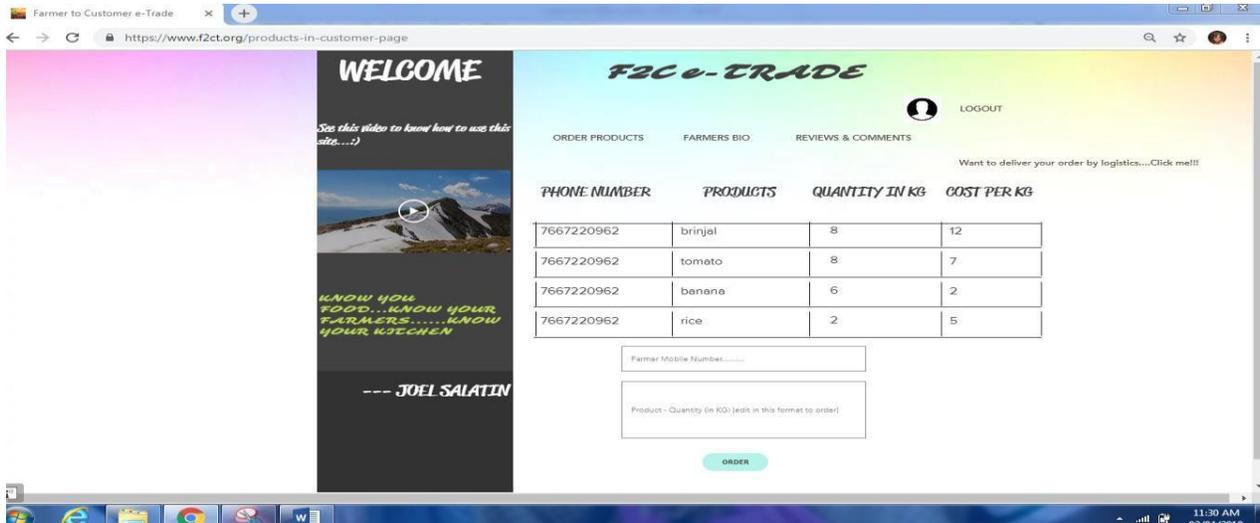


3.2.4 Farmer profile

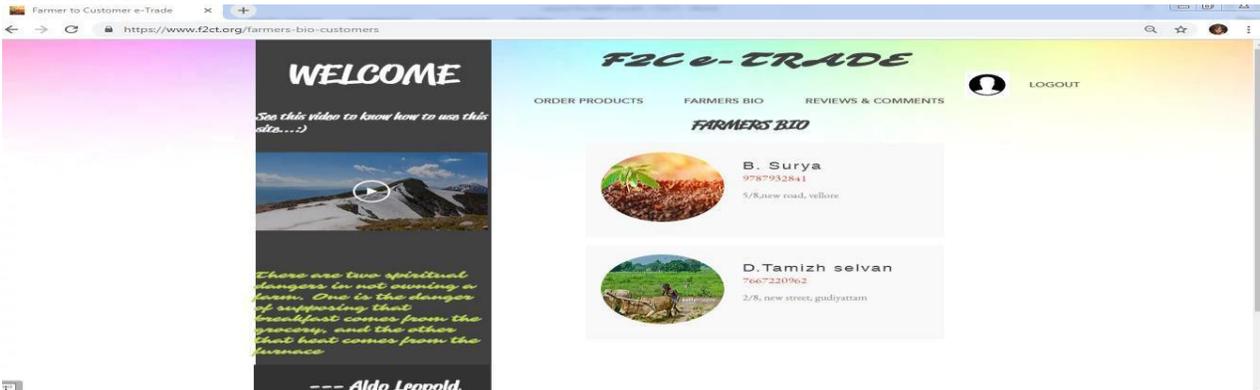


3.3 Customer Page:

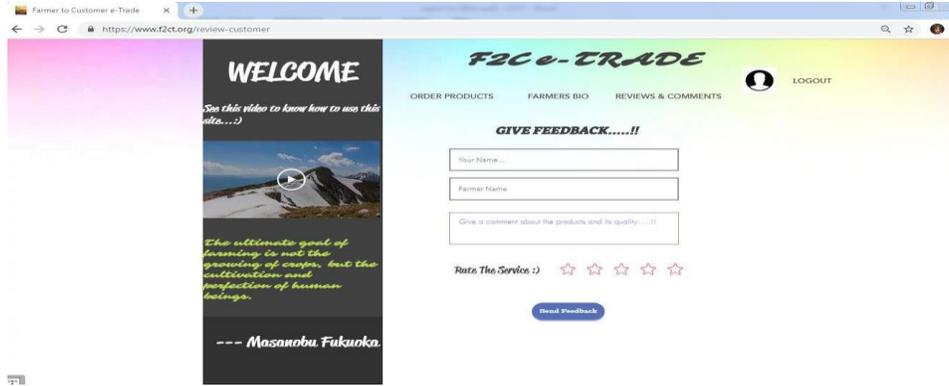
3.3.1 Order Products



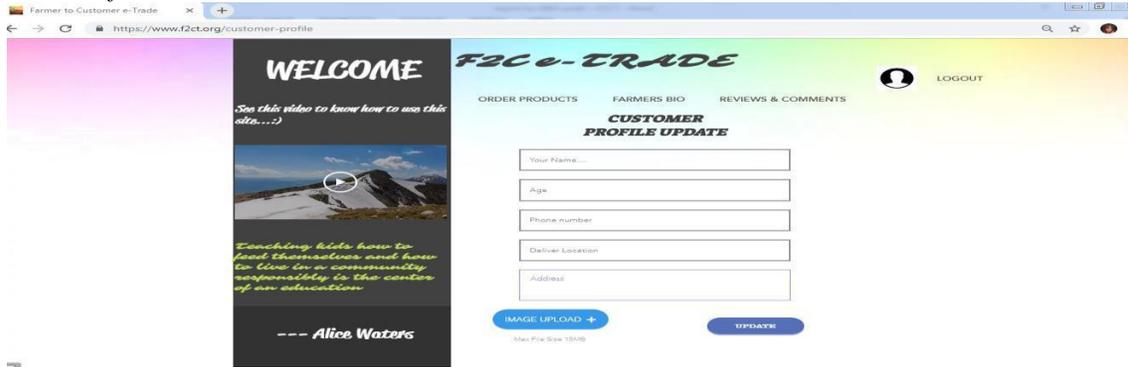
3.3.2 Farmers Bio



3.3.3 Review Comments to Farmers



3.3.4 Customer Profile

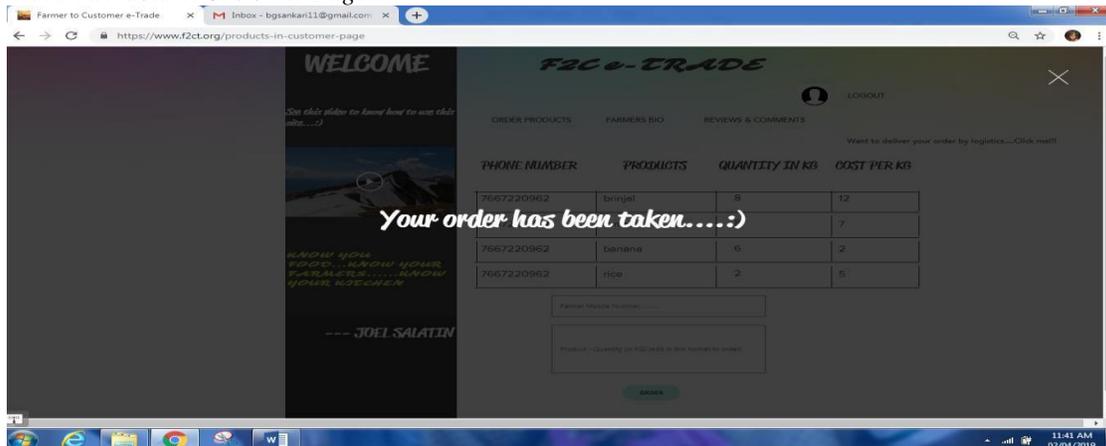


3.4 Light Boxes

3.4.1 Alert in login page



3.4.2 Order taken window in Customer Page



#### 4. CONCLUSIONS

Thus a customer can order the products in this website and can able to get the fresh and quality products directly from the farmers. By doing so, both the farmers and the customers can gain more profit. The web page link is shown as [www.f2ct.org](http://www.f2ct.org). This method is provided to uplift the farmer's income and reduce the productivity cost. The ICT is used for the development of the food distribution system.

#### 5. ACKNOWLEDGMENT

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