



SURVEY PAPER ON CASHEW ANDROID APPLICATION

Sheshnag R Adiga¹, Punyashree C Shetty², Ashika S Bhat³, Sumathi Pawar⁴

^{1,2,3}Student, Information Science and Engineering, Canara Engineering college Benjanapadavu,

⁴Associate Professor, Department of ISE, Canara Engineering College, Benjanapadavu, India

Abstract

This application focuses on providing marketing information used by the farmers for selling their cashew crops easily, without the interference of the third party. The present approach aims at the development of the application which will help the cultivators to gain the maximum profit. The major risk involved being cheated by the middle-men. In this paper we mainly focus on the android application which is mainly built to help the cultivators.

Keywords: playstore, Itune., Clustering, geographic information.

INTRODUCTION

In the mission to promote overall growth of Accomplishing self-sufficiency in raw cashew production and maintaining premier position as largest producer, processor and exporter at global level through enhancement of production and productivity in cashew use of digital technology will play a critical role.

With the Sudden rise in the number order to accomplish of mobile users and the high penetration of rates of Smart phone users it becomes imperative to provide the cultivators with a platform for utilizing the existing technical know-how and share the best practices across the community for its betterment.

The main purpose of this project is to provide a content management system to cashew cultivators and the consumers. Using this cashew Android application, the farmers or cashew cultivators will fix the amount and they will get more profit and also to promote overall growth of accomplishing self-sufficiency in raw cashew production. Maintaining premier position as largest producer, processor and exporter at global level through enhancement

of production and productivity in cashew, use of digital technology will play a critical role.

The App is going to be downloaded from different set of people i.e. cashew growers to researchers. Each search for each activity being done on the App gives information about the ongoing activities. This can be used for both research purpose as well as preventive action measure.

At many times, a project aimed to build a mobile application will require both a website and a native mobile application. React and React Native can be written by the same developer and both applications are able to share code as the applications and both written in JavaScript. Being one of the latest technologies the longevity of the app will be more hence being flexible to add further features. As the application would be primarily used by agricultural farmers, there is a need for ease of use clubbed with working on lesser speeds of data connection. The app should consume less data to prompt users to use it for their regular support. The solution being proposed is an integrated solution with Common database for mobile app and CMS system. As depicted, respective play store or Itune will be used for the providing the user to download the app. The user must download the app and then complete the process of registration. Post registration the app will use the data stored in the server pointed by the CMS system to access. The Data processing and reply timing will solely depend on the connectivity offered by the server.

The App is going to be downloaded from different set of people i.e. cashew growers to researchers. Each search or each activity being done on the APP gives information about the ongoing activities. This can be used for both research purpose as well as preventive action

measure. The following features will be provided to the CMS in the form of analytics:

- (1) Clustering of the specific search based on geographic information.
- (2) Plotting of different set of crops or different sets of pesticide searches / chat analytics from the chats being done in the group.
- (3) App response timing statistics to visualize app performance.
- (4) Information collection mechanism on crop size, yield and collate over a geography area based on chats, searches.

The users of this application are mainly the cultivators of the crop, consumers and the admin. The admin controls the whole application and he updates whenever required.

The application contains many features which helps both cultivators and customers. One of such feature is the updation of the rate of the crops. The admin updates the rate of the cashew crops each day, which in the other hand helps both of them to know the actual rates. The payment can be done when the crops are given to the customers. The farmer needs to register before using the app. As soon as he fills in the details, an OTP is generated. Using the password they can Login to their account. Various information about growing crops like irrigation, disease management, intercropping, and other useful information will be given to the farmer. They can sell their cashew crops by giving the data such as price, pictures, quality and much more. They also get the notification whenever a customer is interested to buy the cashew nuts.

The customer on the other hand also needs to do the registration. They can later Login to view or use their account. They can easily view the products. Due to the user friendly interface, it is easy to view those crops and choose among them. And later they can buy the selected one easily.

An extra feature, feedback form is also provided for the customers.

The admin is the one who handles everything here. They need to provide the connection for

the farmers and the customers. They also update things such as videos, photos, the information which needs to be provided. The cashew rates are updated in the app by the admin. This can be viewed both by the cultivators and customers.

II. LITERATURE SURVEY

[1] P.E. Adejo, E.G Zakari reviewed the youth participation in cashew nut marketing in Ankpa Local Government Area of Kogi State, Nigeria. It specifically described the socioeconomic characteristics of the youths, examined the profitability of youth involvement in cashew nut marketing, assessed the efficiency and performance of youth in cashew nut marketing, and determined the level of market integration in cashew nut marketing. A three staged random sampling method was used to select 120 youth involved in cashew nut marketing for the study. Relevant primary data obtained through structured questionnaire were analysed using descriptive statistics, gross margin model, marketing efficiency, and Pearson price correlation.

[2] Dr. Krishna banana, Veeranjaneya Kumar P said cashew is often regarded as 'poor man's crop and rich man's food and is an important cash crop and highly valued nut in the global market. It has the potential to provide source of livelihood for the cashew growers, empower rural women in the processing sector, create employment opportunities and generate foreign exchange through exports. The area under cashew cultivation is the highest in India. However, it is not so in the case of productivity, processing and quality. In reality, the Indian cashew industry has a high untapped potential to support the livelihood of cashew farmers, provide numerous employment opportunities and improve returns through global trade. The present work projects the need for important changes to be made in the existing system, so as to find a substantial improvement in the growth of the Indian cashew industry.

[3] Dr. Krishna banana, Veeranjaneya Kumar P reviewed in their paper about cashew processing, using manual techniques, was started in India in the first half of the twentieth

century. It was exported from there to the wealthy western markets, particularly the United States. In the 1960s, some of the producing countries in East Africa began to process nuts domestically rather than sending them to India for processing. This allowed them to benefit from the sale of both processed nuts and the extracted cashew nut shell liquid. It is interesting to note that cashew spread within these countries with the aid of elephants that consumed the cashew fruit along with its nut. As the nut was too hard to digest, later, the undigested nut was expelled with the droppings and that resulted in the spurt of cashew plants.

[4] Jae Hee Jeon and Kyunghee Kim analysed the requirements of the mobile app of Cashew, and it is the process that searches and analyses other apps and evidence-based literature for contents organization of the app. The design stage is the process of designing functional requirements and user interface screens that are needed for app development. At the development stage, a database and the actual app were developed.

[5] Oladejo et al analyzed the structure of cashew nut market and profitability of the enterprise in Oyo State of Nigeria in their paper [1]. The specific objectives were to examine the socio-economic characteristics of the respondents, investigate the marketing activities, analyze the cost and returns associated with cashew nut marketing, examine the structure of cashew nut market and identify challenges faced by cashew nut marketers in the study area.

[6] Bianca Dendena reviewed the cashew production chain in his paper. Main conclusions are as follows:

- (1) Several management practices, processing methods, and uses of products and by-products are published.
- (2) However, there is still a lack of knowledge due to a scattered research framework lacking integrated research programs.
- (3) Smallholder farmers face major constraints limiting the development of cashew sector locally, ranging from difficult access to good planting material and training to lack of investment for innovating processing facilities.
- (4) Among them, women, that account for up to 95 % of the workforce in the sector, receive

lower wages and are subject to worse working conditions.

[7] P.E. Adejo, J.O. Otitolaye & U. Onuche reviewed the marketing of cashew nut is mostly affected by price instability due to seasonality nature of its production and lack of storage and processing facilities. However, a controllable pricing system for efficient and effective marketing can be ensured by proper storage and consistent supply of cashew nut in order to keep the market active all through the year.

[8] B. Johnson in his paper, aimed to find the marketing behavior of new and old farmers of Cuddalore district, Tamil Nadu. The study reflected the relationship of characteristics of the cashew farmers with their marketing behaviour. The study was conducted in four villages from "Panruti" block of Cuddalore district.

TABLE I. COMPARISON TABLE

Author	Year	Description
P.E. Adejo, E.G Zakari	2018	They reviewed about the youth participation in cashew nut marketing. It examined the profitability of youth involvement in cashew nut marketing, assessed the efficiency and performance of youth in cashew nut marketing, and determined the level of market integration in cashew nut marketing
Dr. Krishna banana, Veeranjaneya Kumar P	2017	They proposed a flexible software based platform for license plate identification and applications described.
Jae Hee Jeon, Kyunghee Kim	2016	They analysed the requirements of the mobile app of Cashew, and it is the process that searches and analyses other apps and evidence-

		based literature for contents organization of the app.
Oladejo, Joana Adefemi	2015	They analysed the structure of cashew nut market and profitability of the enterprise.
Bianca Dendena& Stefano Corsi	2014	They reviewed the cashew production management practices, processing methods, and uses of products and by-products.
AdejoPE, Otitolaye JO, Onuche U	2011	They reviewed the marketing of cashew nut which is mostly affected by price instability due to seasonality nature of its production and lack of storage and processing facilities.
B. Johnson and M. Manoharan	2009	They aimed to find the marketing behavior of new and old farmers. The study reflected the relationship of characteristics of the cashew farmers with their marketing behaviour.
Agbongiarhuoyi Anthony E ,Aigbekaen E.O	2008	They reviewed the inadequate recognition and exploitation of cashew potentials pose serious problems to farmers and stakeholders.
Aliyu OM	2005	They reviewed the recalcitrant nature of cashew has been attributed to the limited success recorded so far in the in vitro culture of the crop and abnormal development has been reported in the calli derived from its

		explants.
Deckers J, Cundall SH, Shomari NA, Bassi G	2001	They estimated the economic analysis of cashew nut marketing among buyers.
Sharma T.C and Sharma C.K	1980	They reviewed to study the cost benefit ratios and the levels of the profit received to the growers from the cashew crop.

Two villages from Panruti block and four villages from Vridhachalam block of Cuddalore district farmers were selected for the purpose. The sample size consisted of 45 respondents each from old garden and new garden. Majority of the respondents had medium level of marketing behaviour. New garden respondents exhibited better marketing behaviour than the old garden respondents. Without value addition, the nuts were being sold as raw to the local traders. Cashew nuts were sold by majority of the respondents whenever there was fair price for nuts in the market.

[9] Agbongiarhuoyi Anthony E ,Aigbekaen E.O reviewed the inadequate recognition and exploitation of cashew potentials pose serious problems to farmers and stakeholders in Nigeria in terms of sustainability of the sub sector. The study investigated the awareness of cashew products potentials and marketing information among farmers. Sixty respondent farmers were sampled in Kogi State, which accounts for a total cultivated area of above 30,000ha of cashew in Nigeria. A systematic random sampling technique was employed in selecting the respondents. Data were collected with the use of well-structured questionnaire and analyzed using descriptive statistics as well as Pearson product moment correlation coefficient.

[10]AliyuOMproposed in his paper that the recalcitrant nature of cashew has been attributed to the limited success recorded so far in the in vitro culture of the crop and abnormal development has been reported in the calli

derived from its explants. Browning of explants in cashew was found to be due to the presence of high secondary metabolites and it has been reduced through frequent transfer of explants, addition of activated charcoal and dark treatment. Explants necrosis has also been traced to the effect of strong sterilization. Meanwhile, the use of explants from in vitro germinated seedlings or fungicidal treated young flush has been found to improve the success rate significantly. The use of MS base salt supplemented with two-step treatment of cytokinins enhances the response of cashew explants and development of derived plantlets.

[11] Deckers J reviewed in his paper to estimate the economic analysis of cashew nut marketing among buyers in Ogbomosho metropolis of Oyo State, Nigeria. Primary data was used and multistage sampling procedure was adopted for the population of cashew nut marketers in the study area. A total number of 116 respondents were interviewed. The data collected were analysed using inferential statistical tool such as regression analysis. Budgetary analysis technique was also used to analyse the profitability of cashew nut in the study area.

[12] Olubode, o.o., t.t. Joseph-adekunle in his paper reviewed the important research gaps observed in the production practices, assesses the various biotic and abiotic factors that contribute to the immediate and future cashew production and productivity, and highlights important plant features to harness as potentials to further optimize crop development, crop management and economic output. Different landraces of differing nut grades have been adopted for different ecological zones and these possess differing characteristics of crop growth, seed sizes, quality, and yields. Improving cashew growth and yields should commence at nursery stage for the selection of vigorous plants, adoption of appropriate plant spacing, soil amendment methods for different soil types, weed management methods at different crop growth stages and irrigation techniques for dry areas which are those cultural practices that need appraisal.

[13] Sharma T.C and Sharma C.K reviewed to study the cost benefit ratios and the levels of the

profit received to the growers from the cashew crop. According to them, the cashew has a special economic status. Hence the cultivators can be benefited from this. Comparison table is given in Table-1.

III.CONCLUSION

The conclusion of this paper is, the development of this application gives very crisp general information about scope, history, climate, shoot and root growth of cashew application. This app guides every cashew farmer registered in this application. From this project cashew farmers will be able to get help and more information about cashew, which will help to grow cashew profitably. The real benefit of this type of application is to get up to date information. In addition to that farmers should be aware of accessing information through Android application for betterment.

REFERENCES

- [1] P.E.Adejo, E.G Zakari, "Analysis of Marketing Channel and Pricing System of Cashew nuts", Apr-2018.
- [2] Dr. Krishna banana, Veeranjanya Kumar P, "Problems and Prospects of Cashew nut Processing Industry", ISSN: 2456-6683 Volume - 1, Issue -09, Nov- 2017.
- [3] Dr. Krishna banana, Veeranjanya Kumar P, A Study On Cashew Manufacturing Process, ISSN - 2456-6683 Volume - 1, Issue - 2, Apr - 2017.
- [4] Jae Hee Jeon and Kyunghee Kim, "Development of Mobile App", Advanced Science and Technology Letters .Vol.12, pp.229-233, 2016.
- [5] Oladejo, Joana Adefemi, "Profitability and structural analysis of cashew nut market in Oyo State, Nigeria", International Journal of Agricultural Policy and Research Vol.3 (3), pp. 114-221, March 2015.
- [6] Bianca Dendena & Stefano Corsi, "Cashew, from seed to market: a review", Agron. Sustain. Dev. (2014) 34:753-772 DOI 10.1007/s13593-014-0240-7.
- [7] Adejo PE, Otitolaye JO, Onuche U, (2011): "Analysis of Marketing Channel and Pricing System of Cashew nuts" in the North Central of Nigeria J. Agric. Sci. 3: (3)246-250.

- [8] B. Johnson and M. Manoharan, "Marketing Behaviour of Cashew Farmers", *Indian Res. J. Ext. Edu.* 9 (1), January 2009.
- [9] Agbongiarhuoyi Anthony E , Aigbekaen E.O:” Awareness of cashew products potentials and market information among farmers”, June 2008.
- [10] Aliyu OM (2005) Application of tissue culture to cashew (*Anacardium occidentale* L.) breeding: an appraisal. *Afr J Biotechnol* 4(13):1485–1489, ISSN: 1684–5315.
- [11] Deckers J, Cundall SH, Shomari NA, Bassi G (2001): *Cashew Crop Production in Tropical Africa*. Romain H.Reamaekers (Ed.) Published by Directorate General for International Cooperation (DGIC), Brussels, Belgium. pp.236-238.
- [12] Olubode, o.o., t.t. Joseph-adekunle, hammed, l.a., olaiya, o.a.: *Evaluation of Production Practices and Yield Enhancing Techniques on Productivity of Cashew*, 1995.
- [13] Sharma T.C and Sharma C.K: “*Geography of cashew fruit farming*” p-78, 1980