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# Marketing Agricultural Products through ICT – An acceptance study

**Prof. Shakeela Banu C[1],**
Research Scholar,
Reva University, Bangalore,
Karnataka, India Bangalore, Karnataka, India

**Dr. Narayan Reddy[2],**
Professor,
School of Management Studies,
Reva University, Bangalore, Karnataka, India

**Dr. Raju Ramakrishna Gondkar[3],**

Professor & Head,

Dept of MBA, Nagarjuna College of Engineering,

Bangalore, Karnataka, India

**Abstract:**

The paper is a study of the impact of various agricultural schemes introduced in the Karnataka state by the Givernment to enhance better market availability to farmers. Marketing in the state of Karnataka – Gauribidanur Taluk, Chickballapur Dist, Karnataka is considered in this study. This geogrophical region is choosen as it close to the IT hub of the country – Bangalore and is well connected by roads and various information sources. The introduction of ICT is the most obvious means to enhance the lives of farmers. However it is to be studied why the previously introduced measures are not so effective and the reasons for farmers to rollback to older methods of marketing. This paper makes an attempt to understand the various reasons and then use this as a basis to develop a new model of ICT which will be implemented and used for a more effective reform. The design and changes in the questionnaire were prompted by the need of data. The reasons for people to stop using a specific scheme gave us the insight of the problems faced. It was interesting to note that social status and the economic factors also played an important role in adopting the marketing schemes and methods.

**Keywords: Agricultural marketing, awareness of marketing schemes, problems of marketing, target section for ICT, factors effecting ICT.**

## Introduction

The history of Indian agriculture can be traced back to Indus valley civilization era and is said to be main occupation of Southern India even before the civilization existed. The Gross Domestic Product (GDP) was contributed to the extent of 13.7% in 2013[1]. Workforce of about 50% of the country was involved in farming and other allied sectors of agriculture. [2][3]. Agricultural products marketing started with the most primitive style of weekly gatherings in villages where the products needed for the succeeding week were exchanged or bought. The storage mechanism being poor, the quantity of purchase and sale was also limited and many vendors travelled with long life products like the food grains to various village gatherings also called as "Santhe" which would be a business day in a week. Each village had such gatherings on different days of the week facilitating the merchants to move from one location to another.

The increase in food production and better transport facilitated transport of goods and movement of agricultural stock from one place to another leading to opening up of marketing and better marketing practices [4].

The penetration of Information Technology (IT) in all walks of life has not spared the marketing or the rural markets and agricultural products' marketing from rural places of agricultural production. The paper is an attempt to study the existing ICT effect and the factors that press for better facilities as ICT is not completely blended in marketing of agricultural products.

ICT in Karnataka is at its peak for more than two decades now and has enriched the lives of millions with its durability, reliability, robustness, dependability, ease of use and simplified solutions/implementation to real world problems [5]. The life of the urban people is so much filled with these solutions that they tend to suffocate without even one of them in their daily life. This is a clear indication that the solutions produced thus far are competitive enough to provide natural easiness to the process of agricultural marketing.

The paper is based on the study in Gauribidanur Taluk, Chickballapur Dist, Karnataka, India. It is our serious concern to provide a viable solution to the farmers to sell the products of hard earned and toiled agricultural products to a good price in the market. We have collected data through a survey conducted to understand the problems faced by them in marketing the produced agricultural goods and the hardships in the process of marketing the agricultural products produced.

The taluk is chosen because agriculture is the main activity of the taluk and is close to the silicon city of the country – Bangalore. The area has an overall cultivation area of 58,510 hectors of land out of the total geographical area of 86,726.98 hectors. This is a clear indication highlighting that 67.46% of the geographical area is cultivated and the pond area marked as 6,637.17 hectors enhances the overall land used for agricultural activities to more than 72% of the geographical land in the Gauribidanur taluk.

## Existing Marketing System

The taluk is close to Bangalore, the capital city of Karnataka and hence has better transport facility, telephone connectivity, and access to agricultural university, farmer's call center through mobile, marketing yard and other basic amenities needed for marketing the agricultural products. Some of the prominent methods of marketing observed during the survey are as follows:

### *Marketing Yard*

Marketing yard is a facility provided by the state government to sell the agricultural products produced by the farmers. The government has a minimum price fixed for all the items. This price is fixed based on the demand and production as per the statistics available with the government.

***Agencies***

There are a number of agencies who would provide all the inputs for agricultural, these include rain data, seeds, manure, fertilizers, insecticides, relevant information at the right time and finally tools' support if needed. These agencies provide the farmer with agreed sum and take the crop. The method though is not very popular, is picking up in areas where perishable products are grown and on a small time farming basis. [7]

***Wholesale purchase at the field***

This is the process of selling the crop at a very early stage of growth. The buyer after an inspection of the field fixes a price and buys the crop even before the crop begins to show up. This is a gamble on both the parties as the expectancy is evaluated even before the right time. The farmer gets respite and protection from fall of price that may happen. However though not a popular method, it is still in practice for vegetables and other preliminary crops.

***Marketing Agents***

The marketing agents fund the farmers in time of need and ensure that the farmer sells his crops to them. This is a very old practice followed from ages and though has been severely criticized by the Governments and various other organizations has still managed to survive due to the loop holes and hardships that prevail in a farmer at various stages of farming. This leads to selling of crops at a much lower price in comparison to the market price. The farmers usually take comfort in the fact that the cost of transportation, harassment in open market and a long wait for settlement are not suffered. [8]

***Contract farming***

The method though not implemented in all the states still has a good amount of effect on the perishable agricultural products. This scheme is more modified by the private players to ensure that all the initial investment need for farming is provided by them and would have a price fixed well in advance so that the farmers have a ready market in hand.

## Major Problems Faced by the Farmers

There are a number of problems that ponder during the farming cycle. The process of farming depends on number of parameters like the climate, rain, fertility of the soil, quality of seeds, manure, fertilizers, availability of labor, transportation, availability of tools, in-time information of change in water flow in canals, quantity of water that will be made available to them, market fluctuations and so on[8]. All these factors should come clean, good and in time for a crop to be harvested and sold at a profit! These parameters are only an indication to the complexity faced by our farmers.

## Survey of the Geoerophical area

The geographical area of Gauribidanur Taluk, Chickballapur Dist, Karnataka is divided into six hoblies (defined as a cluster of adjoining villages administered together for tax and land tenure purposes in the states of Karnataka and Andhra Pradesh, India). Each of these hoblies has an average of 39 villages in each. There is a total of 86,27 hectors of geographical land of which 37,962 hectors of land depends on rain water for agriculture (dry land), 9,942 hectors of land is wet land and 10,605 hectors of land is irrigated land. This land is distributed among 49,246 farmers of which 43,788 farmers are small & medium farmers and 5,458 farmers are big farmers. It was interesting to know that there are 137 small & medium ponds and 7,595 bore wells in this area. There is a bore well for every 11.46 hectors of total

land in this taluk which should have been sufficient for all the needs. But it is the failure of these bore wells which leads to more severe consequences especially for agricultural purposes.

### Sample collection

There are a number of ways in which data can be gathered to understand the behavior of the masses. Our study is an investigation about the reasons for farmers' inability to harvest the advantages the information technology though the place geographically close to the IT hub of the country – Bangalore. The birds view suggests that not many of the farmers are doing well. There seems to be different faces of spoil sport engulfing the profits year after year and the farmer only hoping for the best nest year.
This study focuses on unearthing the various difficulties of the farmers at the grass root level and in this paper we concentrate on the behavior of the farmers to adopt new technology if provided to them at an affordable and an easy to use way.

### Sample collection through questionnaire

The questionnaire is designed to meet the objectives of the study in seven different segments of the questionnaires. The segments can broadly be classified as personal details, type of farmer, type of land held, water source, investment for cultivation, marketing strategy adopted and the reasons for such marketing strategy. Open ended questions form the basis of understanding the behavior of the farmer with respect to marketing. The questionnaire was formulated and on beginning of the piolet study it was found that there existed many more customized reasons for the farmers not to avail facilities extended by marketing yards. This lead to restructuring of our questionnaire where in two prongs of questions were introduced like the one allowing them to express themselves in form the most difficulty faced during transactions with marketing yards and the other an open ended question of how they felt the situation on the ground could be improved based on the problems with marketing.

### Sampling size

The sample size based on the population is considered. The sampling is done based on the "type of farmer" so that the study addresses both the geographical and the economic status of the farmers. The sampling was considered at a confidence level of 90% allowing for a margin of error of 10% and the response distribution of 25%. The following tables provide a hobli wise collection of data. Total number of respondents is 699 out of which 405 farmers were small farmers and the remaining 294 farmers are big/large farmers with over five acers of land.

Type of farmer: Small Farmers

| Hobli | No of villages | Total Population | Sample size |
|---|---|---|---|
| Kasaba | 38 | 8299 | 68 |
| Hosuru | 36 | 10472 | 68 |
| Manchana halli | 48 | 6034 | 67 |
| Thonde bhavi | 42 | 7509 | 68 |
| D Palya | 32 | 6292 | 67 |
| Nagaragere | 42 | 5182 | 67 |

Type of farmer: Big/Large Farmers

| Hobli | No of villages | Total Population | Sample size |
|---|---|---|---|
| Kasaba | 38 | 1054 | 49 |
| Hosuru | 36 | 891 | 49 |
| Manchana halli | 48 | 564 | 49 |
| Thonde bhavi | 42 | 1012 | 49 |
| D Palya | 32 | 835 | 49 |
| Nagaragere | 42 | 1102 | 49 |

**Analytical study**

Analytical study of the data was performed to study the awareness of new schemes launched by the government and to understand the percentage of people who would be willing to use ICT in marketing. The analysis was carried out to understand the awareness of various Government schemes and the number of people using it. This was to identify the percentage of people who actually gave a try to these new schemes and are using it. If they have discontinued using the scheme then we concentrate on collecting the reasons. If a person is aware of the schemes but is not using it, it is an indication of lack of motivation or apprehension to use new technology. The reasons for this apprehension form the basis for our development of an ICT model.

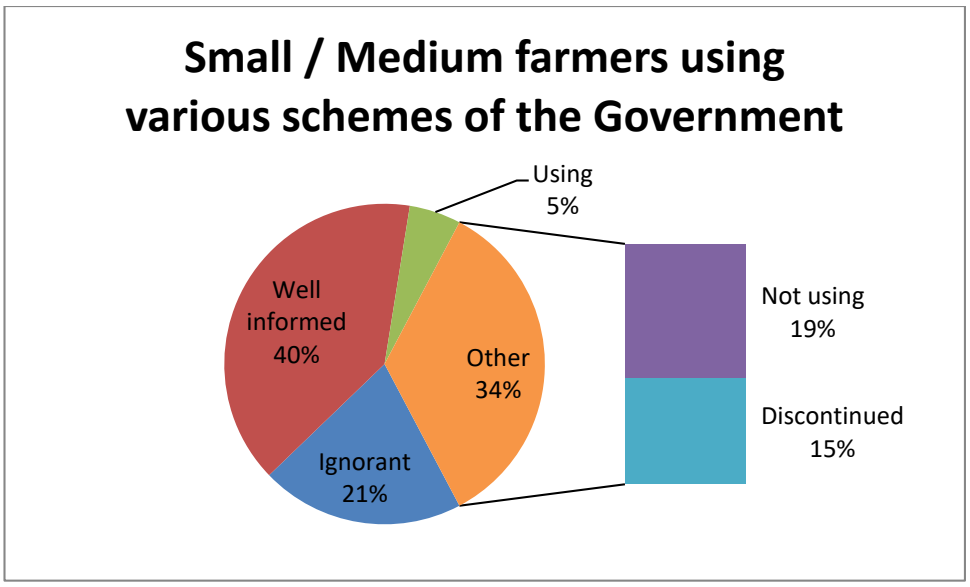


**Fig 1: Small / Medium farmers using various Government schemes**

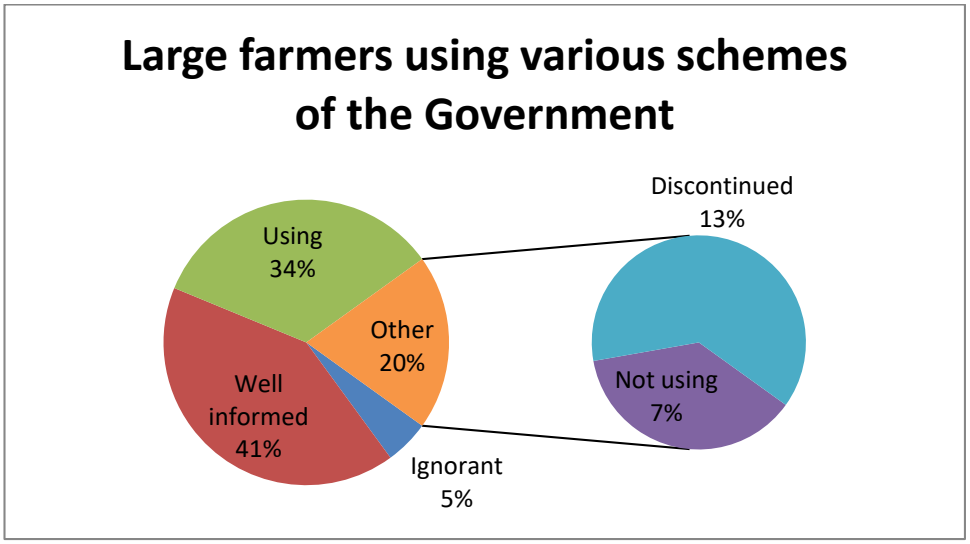


**Fig 2: Large / Big farmers using various Government schemes**

## Inference

The analysis of collected data provides us with a broader view when it is divided into small/medium farmers and large/big farmers. It is seen that:

a. The awareness about new schemes for marketing/betterment of farmers is equally known to both the categories.

b. The ignorance level of various schemes of the government is very high in small/medium farmers.

c. Large/Big farmers are making better usage of the facilities provided by the government.

d. The number of small farmers who are well informed about the new schemes but are not using it are high in small farmers.

e. Discontinued using marketing schemes and sale through marketing yards are almost the same in both the categories and the reasons for it was analyzed as follows:

- Unaware of grading methods
- Absence of common brands of crops
- Middle men offering better prices
- High transport cost
- Lack of understanding Market trends
- Lack of storage facility

f. Farmers selling through government marketing yard methods are people who understand the market and trends in marketing. These are people willing to wait for the proper price and have moderate storage facility.

## Conclusion

The paper attempts to understand the reasons for farmers not making good profits despite good yield. In this process the application of ICT is being tried. There are a number of new marketing models proposed but not all are implementable more due to fact that the ground realities differ from geographical region to region and from one social status to another. The further study would deal with development of a model using available ICT tools in the region along with the other facilities in place. The model hence

developed would be closer to reality and would definitely be more easily implementable and would retain the farmers in using the model. Further analysis of data is also considered to understand the finer social parameters leading to implementation of ICT managed marketing.

## References

[1].{https://books.ca/books?id=pU6dCgAAQBAJ&pg=PA96&dq=agriculture+in+india+indus&hl=en&sa=X&ved=0ahUKEwjvoyoP3svbNAhUI9x4KHZopA7kQ6AEINjAC#v=onepage&q=agriculture%20in%20india%20indus&f=fale}.

[2] [3]. {CIA Factbook:India", CIA FactBook, Central Intelligence Agency} {Staff, India Brand Equity Foundation "Agriculture and Food in India"- 2013}.

[4]. Problems and Prospects of Agricultural Marketing in India: An Overview International Journal of Agricultural and Food Science

[5]. Agricultural Marketing: A National Level Quarterly Journal on Agricultural Marketing

[6]. International Journal Of Trade, Economics And Finance,Vol.2,No.4,August 2011- Innovative Agricultural Information Services By ICT Projects In India.

[7]. Avgerou, C. (2008). Information Systems In Developing Countries: A Critical Research Review, Journal Of Information Technology, 23, 3, 133-146.

[8]. ICT For National Development In Nigeria: Creating An Enabling Environment.

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