

## **Original Research Article**

### **Usage of mobile phone technologies of Agricultural extension services utilized by farmers**

#### **Abstract:**

This study investigates the different types of agricultural information obtained by the farmers through mobile phone technologies of agricultural extension services in Villupuram district, Tamil Nadu. The research examines the penetration of mobile phones, farmers' familiarity with various agricultural apps and services, and the impact of these technologies on farming practices. Through surveys and interviews with 150 farmers, the study reveals the awareness level of the farmers in using mobile phones for agriculture. The results indicate regarding the Government schemes related to agriculture more number of farmers (13 per cent) using mobile phones, this highlighting the potential for mobile technologies to enhance agricultural productivity and knowledge dissemination in the region. This research contributes to understanding the role of digital technologies in modernizing agricultural extension services in rural India.

**Comment [MM1]:** No keywords under your abstract.

#### **Introduction**

One of the primary forms of communication technology in both developed and developing nations is the mobile phone. Mobile phones have become more significant than landline phones. In the 20th century, these technologies have grown in North America and Europe. In recent years, the sector has grown quite quickly. One billion mobile phones were sold globally in twenty years, compared to four years for the second billion and two years for the third. In developing nations, there has been a rise in the coverage and subscription of mobile phones. An estimated 50% of people on the planet are thought to own a mobile phone. Nonetheless, it was found that 80% of people reside in areas covered by mobile phone networks [1]. Information and communication technology (ICT) have made it possible to share and improve knowledge and information among members of various communities by offering new concepts, approaches, and strategies. Without a doubt, rural people have enhanced their agriculture and products by adopting communication technology. The evolution of agriculture has changed significantly as a result of the usage of ICTs, such as mobile phones [2,3,4]. Farmers now have fresh perspectives and methods for deciding how to obtain market and weather information from relevant parties thanks to mobile phones. Farmers may now stay informed about the market and weather while also interacting with customers to sell their goods at a fair price [5,6,7]. This paper mainly discusses, for what purpose farmers are using mobile phone technologies for agriculture.

#### **Materials and methods**

The Tamilnadu district of Villupuram was chosen at random for this investigation. Five blocks—Kanai, vikkiravandi, ginge, Kandamangalam, and Koliyanur from the Villupuram district of Tamilnadu were chosen at randomly for the study. For this study, a sample size of 150 farmer respondents was used. A well-organised and tried-and-true questionnaire interview schedule was used to gather the data. The data collected by the interview method was more reliable. Karl Pearson's coefficient of correlation and descriptive statistics were used to examine the collected data using SPSS software (25).

#### **Objective of the study**

To study the different types of agricultural information's obtained by the farmers through mobile phones

**Comment [MM2]:** Objective should come before materials and methods.

**Table 1 shows the frequency and per cent of farmers attained different types of agricultural informations**

(n=150)

(Multiple answers allowed)

S.NO	Different Agricultural information's	Frequency	Percentage
01	Seed and sowing	103	10.0%
02	Fertilizer	103	10.0%
03	Pesticide and weedicide	84	8.0%
04	Machinery and farm labour	41	4.0%
05	Use of input and output	14	1%
06	Harvesting and storage	95	9%
07	Marketing condition and prices	108	11%
08	Electricity timing	108	11%
09	Animal husbandry	106	11%
10	Govt. scheme	129	13%
11	News reports	116	12%
	<b>Total</b>		<b>100%</b>

### Result and discussion

From the table 1 and diagram 1 should be clearly understood that, out of 150 respondents, the greatest number of farmers (13 per cent) use mobile phones for knowing Government schemes regarding to agriculture. After that, most numbers of farmers (12 per cent) of farmers using mobile phones for news report regarding to agriculture. They use social medias and other agricultural apps like uzhavan app, plant X etc.

And also, it should be understood that, next to news report, 11 per cent of farmers use mobile phones mostly for animal husbandry, electricity timing and market condition and prices. They get this information through WhatsApp, facebook and other social medias.

Nowadays, Government creates awareness to the farmers about government schemes through SMS, newspaper ad, whats app, facebook, twitter, etc. Every Government department regarding to agriculture and allied sectors they handling own department profile in social medias like whats app, facebook, twitter, you tube, Instagram, etc. It should be a very great initiative in the growing technological world.

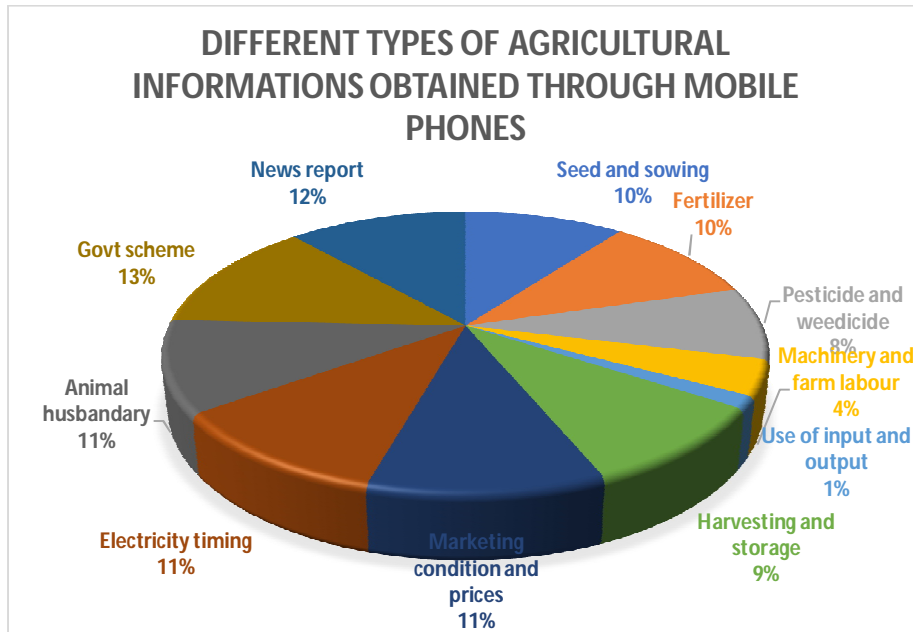
In future agriculture should play a major role in everyone's life. Government wants to create a more awareness about ICT technologies regarding agriculture among farmers and it want to be reached to **gross** root level of farmers. In this technological world, farmer also want to use new technologies like automatic irrigation, automatic fertigation, pesticide spraying form home to farm.

**Comment [MM3]:** Grassroot not gross root.

**Comment [MM4]:** You moduled up your discussion with conclusion and recommendations. Please, put results and discussion separate followed by conclusion and recommendation.

**Diagram 1.**The per cent of agricultural informations obtained by **famers**

**Comment [MM5]:** Let your diagram 1 come before the results and discussion.



## References

1. GSM. (2006). Universal access. How mobile can bring communication to all. <http://www.gsmworld.com/universalaccess/index.shtml>
2. Arokoyo, T. (2005). ICTs application in agricultural extension service delivery. In S.F.Adedoyin (Ed.), Agricultural extension in Nigeria (pp. 32–40). Ilorin, Nigeria: Agricultural Extension Society of Nigeria.
3. Gregg, J. A., & Irani, T. A. (2004). Use of information technology by county extension agents of the Florida Cooperative Extension Service. Journal of Extension, 42 (3).
4. Warren, M. F. (2002). Adoption of ICT in agricultural management in the United Kingdom: The intra-rural digital divide. Agricultural Economics, 48(1) 1–8.
5. Bayes, A., von Braun, J. and Akhter, R., (1999). Village Pay Phones and Poverty Reduction: Insights from a Grameen Bank initiative in Bangladesh. ZEF discussion Papers on Development Policy No. 8 Centre for Development Research, Bonn.
6. Goodman, J., (2005). Linking Mobile Phone Ownership and Use to Social Capital in Rural South Africa and Tanzania, Vodafone Policy Paper Series, Number 2.