

**TRANSFORMATION THROUGH DIGITALIZATION CONCERNING AGRICULTURE  
AND ALLIED ACTIVITIES AMONG  
RURAL FARMERS**

**Mr. Karthik Gowda C M**, Department of Economics, Sri Sathya Sai University for Human Excellence Navanihal, Okali Post, Kamalapur, Kalaburagi, Karnataka-585313.

**Prof. K. Anandan**, Professor and Head i/c, Department of Humanities and Social Sciences, Sri Sathya Sai University for Human Excellence, Kamalapur Taluk, Kalaburagi – 585313

**ABSTRACT**

In rural areas, the increase in digitalization happened in various aspects. But, with regard to agricultural and allied activities, there is still a lack of awareness in the villages. This was the main objective of studying the villages which can make us understand many facts which are unable to fix in the macro level of programs. The study belongs to survey research. Questionnaires were prepared and developed with the consultation of agriculturist and two economic professors for content and construct validity. The investigator has also approached many agriculturists to understand the stems to be placed in the Questionnaire. After collecting many numbers of items, he himself scrutinized the items and sequentially altered them. After framing the rough draft, he approached the 3 rural village agriculturists who were selected randomly for the pilot study. Based on the response given the investigator fine-tuned the Questionnaire. Investigators have accumulated essential information from the randomly picked three villages from the Mandya district to do a pilot survey to collect primary data directly from thirty-two farmers.

**INTRODUCTION**

The study contains different variables such as farmers personal information and about his lifestyle. Later on, the collected information has been converted into the data format to run the process using the different statistical techniques and hypothesis. The statistical data given in the table and figures after running different tests such as, t-test and f-test. The interpretation given with the result from the different test conducted. With the received findings, the investigator has observed and understood that the gender inequality and challenges still present in agricultural and related activities through primary data gathered directly from farmers. This dissertation aims to provide some concepts regarding the digital, socio-economic, and ecological effects of digitalization in agricultural and rural settings.

**SIGNIFICANCE OF AGRICULTURE**

The agricultural sector is wide potential to benefit from digitalization in terms of productivity and sustainability. The digitalization of agricultural innovation systems. On the other hand, is likely to have broader repercussions than just farmers' traditional practices. Networks of agricultural knowledge and advice are crucial parts of agricultural innovation systems that could be modified digitally. To anticipate and prepare for potential changes in agricultural knowledge and advice networks from nearby villages in the Mandia district, I have gathered primary data and formed review trends in this paper. Through primary data gathered directly from farmers, we can see the gender inequality and challenges still present in agricultural and related activities.

Digital technologies are frequently viewed as a chance to make farming and rural areas more sustainable in the future. At the global level, digital transformation in rural agriculture is a priority for policy. To achieve a food and farming future that is more intelligent, modern, and sustainable, its objectives fully connect farmers and the countryside to the digital economy. The problems that rural areas and agriculture face as part of the shift toward agriculture, which is contributing to the transformation of agrifood by digital transformation. Digitalization is widespread and sectorial in rural and agricultural settings at the same time. Promoting digital technology and pointing out the description of its potential advantages and disadvantages is of interest to practitioners as well as international political institutions.

### **DIGITALIZATION IS A NEW RAY OF HOPE**

The modern world expects a connection with technology, and automobiles. Providing digital connection to the largest sector would lead to an increase in production which internally contributes to the GDP of the country. The digital platforms will provide positive information regarding many aspects like agriculture (farming activity), financial sector, health sector and sanitation facility which helps in rural people's lives, who are being misled by the middleman and the corrupted government officials. The facility of digitalization with the inclusion related to agricultural activities is the fastest link for the support of the agriculturist who is involved in farming activity.

Sitting in one place the transaction and the facility of the government can be understood through the digital platform. The burden of misleading from the corruption and middleman are being cut off and made direct links for all the beneficiaries through digital platforms.

The facility of digitalization also helps in the field of the healthcare sector, where people can access the schemes related to healthcare. There is larger support which is given by the central government as well as state government towards health-related procedures. The profit oriented and the commercial health sectors are threatening rural people for many situations. The digital access will give greater support to know about the various benefits related to the health sector.

### **NEED OF THE STUDY**

Like in other countries and in other Indian states, Karnataka state in general and Mandya district in particular has rich soil and has a larger scope for farming activity which can lead to larger profit to farmers with access to the digital world. This study aims to find out the Transformation through Digitalization concerning Agriculture and allied activities among Rural people of Mandya district in Karnataka state. It has come into notice that farmers in younger age have more access to digital technology than the elders. More importantly there is minimal gender inequality in this region, where all genders are expected by the government body through digitalization.

### **METHODOLOGY OF THE STUDY**

The investigator followed the Survey Research as he felt more appropriate to the research study. The topic of my problem is "A study on Transformation through Digitalization with reference to Agriculture and allied activities among Rural people". Survey Technique was employed and collected data was statistically analyzed by 't' test and F test. Operational definitions of the key terms and important topics such as digitalization, Agriculture, Allied Activities, Rural villages are the key terms explained below,

**Digitalization:**

The utilize of advanced innovations to alter a trade demonstrate and give unused income and value-producing openings. Agreeing to Gartner, "Digitalization is the utilize of advanced innovations to alter a trade show and give modern income and value-producing openings; it is the method of moving to a computerized business."

**Farming:**

The science, craftsmanship, or hone of developing the soil, creating crops, and raising animals and in shifting degrees the planning and promoting of the coming about items. Associated Exercises: Raising any kind of edit, creature cultivation, poultry cultivating, Agro-processing, fishery, agro forestry exercises drop beneath Agribusiness and Partnered Exercises.

**Country:**

The Census Bureau characterizes rustic as any populace, lodging, or region not in an urban range. This definition clearly indicates to its urban definition, of which there are two topographical sorts: "Urbanized Zones" have a populace of 50,000 or more. "Urban Clusters" have a populace between 2,500 and 50,000.

**OBJECTIVES OF THE STUDY**

The following objectives are as follows:

- i.) To find out the Awareness towards Transformation through Digitalization concerning Agriculture and Allied Activities among Rural People is low.
- ii.) To find out the significant difference between the means scores on the Awareness towards Transformation through Digitalization concerning Agriculture and Allied Activities among Rural People concerning their Gender.
- iii.) To find out the significant difference between the means scores on the Awareness towards Transformation through Digitalization concerning Agriculture and Allied Activities among Rural People concerning their Education.

**VARIABLES IN THE STUDY**

The investigator focuses on largely two variables such as technological and demographic variables. If we consider the technological variable the farmers grasp the different technologies through different gadgets such as smart mobile, laptops and even in the television etc. In the demographic variable the investigator points towards the locality, the area, and the community where the farmers are involved in agricultural and allied activities. The amount of the land possessed by the farmers the investigator's chosen locality.

**POPULATION AND SAMPLE**

The investigator particularly chooses the Mandya district, Karnataka which has a population of around 18.48lakhs. As it was a minor project investigator has focused on the three villages as a location to further study relating to the statement problem. In these three villages the investigator has randomly selected farmers to collect the data regarding the problem study.

**TOOLS DEVELOPED**

There are different tools (instruments) for the collection of data such as Questionnaires, interview methods, observation methods and so on. The investigator felt that the 4-point scale would be more appropriate to his project. The investigator approached many agriculturists to understand the stems to be placed in the Questionnaire. After collecting many numbers of items, he scrutinized the

items and sequentially altered them. After framing the rough draft, he approached the 3 rural village agriculturists who were selected randomly for the pilot study. Based on the response given the investigator fine-tuned the Questionnaire finally to collect the data.

### DATA ANALYSIS

After Administering the Questionnaire, the investigator prepared master table for the Questionnaire and the response collected. Then it has undergone statistical techniques like, mean, median, standard deviation, t -test and F-test Etc.

#### Classification of Analysis

The classification of analysis refers to the grouping of related facts into classes. Economic analysis involves examining issues and problems such as the opportunity cost of various products or services. Concerning my dissertation there are mainly two types of analysis.

#### A. Descriptive Analysis

It is a process of using recent and past data to classify inclination and relations. It is also popular for its ability to generate accessible insight from otherwise uninterrupted data. Descriptive statistics refers to the analysis, summary, and communication of findings that described a data set.

**Table - 1**

Awareness on Transformation through Digitalization with reference to Agriculture and Allied Activities in Rural People

Sl. No.	Variables		N	Mean	SD
1	Total		32	69.40	4.80
2	Gender	Male	23	68.96	5.37
		Female	9	70.52	2.84
3	Education	Upto to 10 <sup>th</sup>	16	70.83	4.92
		PUC	7	67.66	4.66
		UG	4	70.14	3.31
		Above UG	5	66.67	4.91

From the above table it is noted that the acquired Maximum, Minimum Mean and SD values of Awareness on Transformation through Digitalization concerning Agriculture and Allied Activities in Rural People are 70.83 and 4.92 & 66.67 and 4.96. The result reveals that the Mean and SD values of Awareness of Transformation through Digitalization concerning Agriculture and Allied Activities in Rural People of the total sample are 69.40 and 4.80.

#### B. Inferential Analysis

By analyzing the samples are from the population data, inferential statistics aid in the development of a solid understanding of the data. The inferential analysis utilized in the study to determine results using the t-test in the tables below.

**Table – 2**

‘t’ value between the Mean Scores on the Transformation through Digitalization concerning Agriculture and Allied Activities among Rural People concerning their Gender

Sl. No	Gender	N	Mean	SD	‘t’ value
1.	Male	23	68.96	5.37	0.82**
	Female	9	70.52	2.84	

\*\*Not Significant at 0.05Level

It is observed from the above table–3, that the ‘t’ value, 0.82 is not significant at 0.05 level. The result reveals that there is no significant difference between the means scores on the Transformation through Digitalization concerning Agriculture and Allied Activities among Rural People concerning their Gender. Hence, the framed null hypothesis is accepted.

**Table - 3**

A significant difference between the Mean Scores on Transformation through Digitalization concerning Agriculture and allied activities among Rural people concerning their Education

Variables	Education	Sum of Squares	Df	Mean Square	F
<b>Transformation through Digitalization with reference to Agriculture and allied activities among Rural people</b>	Between Groups	93.635	3	31.212	1.41
	Within Groups	621.969	28	22.213	
	Total	715.603	31		

\*\*Not Significant at 0.05 level

It is understood from the above table–4, that the ‘F’ value, 1.41 is not significant at 0.05 level. The result reveals that there is no significant difference between the means scores on the Transformation through Digitalization concerning Agriculture and allied activities among Rural people concerning their Education. Hence, the framed null hypothesis is accepted.

### **FINDINGS FROM THE STUDY**

The findings of the study drawn from the above analysis are given below:

1. There is no noteworthy contrast between the means scores on the Transformation through Digitalization concerning Agriculture and Allied Activities among Rural People concerning their Gender.
2. There is no critical distinction between the means scores on the Transformation through Digitalization concerning Agriculture and allied activities among Rural people concerning their Education.

### **CONCLUSION**

The agricultural sector is accepted as potential to benefit from digitalization in terms of productivity and sustainability. The digitalization of agricultural innovation systems. On the other hand, is likely to have broader repercussions than just farmers’ traditional practices. Networks of agricultural knowledge and advice are crucial parts of agricultural innovation systems that could be provided digitally. To anticipate and prepare for potential changes in agricultural knowledge and networks from nearby villages in the Mandya district, data gathered primary data and formed review

trends in this paper. Through primary data gathered directly from farmers, there could be gender inequality and challenges still present in agricultural and related activities.

Digital technologies are frequently viewed as a chance to make farming and rural areas more sustainable in the future. At the global level, digital transformation in rural agriculture is a priority for policy. To achieve a food and farming future that is more intelligent, modern, and sustainable, its objectives fully connect farmers and the countryside to the digital economy. The problems that rural areas and agriculture face as part of the shift toward agriculture, which is contributing to the transformation of agrifood with the help of digital transformation.

Digitalization is widespread and sectorial in rural and agricultural settings at the same time. Promoting digital technology and pointing out the description of its potential advantages and disadvantages is of interest to practitioners as well as international political institutions. The purpose of this dissertation is to offer some ideas regarding the digital, socioeconomic, and ecological effects of digitalization in rural and agricultural settings.

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