**REVOLUTIONISING INDIA AGRICULTURE THROUGH**

**DIGITAL TRANSFORMATION**

S. Uma Maheswari, Reg no. 22211201012001, Research Scholar, PG Department of Commerce & Research Centre, Sri Parasakthi College for Women, Courtallam Affiliated to Manonmaniam Sundarnar University, Abishekapatti, Tirunelveli, 627012, Tamil Nadu, India Email: [umakumar1815@gmail.com](mailto:umakumar1815@gmail.com)

Dr.V.Jaisudha Devi, Assistant Professor, , PG Department of Commerce & Research Centre, Sri Parasakthi College for Women, Courtallam Affiliated to Manonmaniam Sundarnar University, Abishekapatti, Tirunelveli, 627012, Tamil Nadu, India [jaisudhadevi81@gmail.com](mailto:jaisudhadevi81@gmail.com)

**Introduction**

The backbone of the Indian economy is agriculture, about half of India's population depends on agriculture and related industries for their living, the sector is crucial to creating jobs in the country. India currently claims to have the second-largest global agriculture market. Agriculture is a significant sector of the Indian economy, accounting for around 18.3% of total GDP. Approximately 60% of the nation's population currently relies on agriculture as their main source of income, according to industry estimates. However, the industry has experienced numerous changes over the years and is currently at the height of its digital transition. By digitising the entire ecosystem, tech-based start-ups are playing a crucial part in relieving the burden on farmers.

India's digital economy has been a disruptive force across several industries, including agriculture. The Digital India programme has completely changed how farming is done in the nation with the goal of utilizing digital technologies to empower farmers, increase productivity, and ensure sustainable agricultural practices. Digital India has given farmers in rural India new opportunities for development, efficiency, and connectedness by incorporating ICT tools into agricultural processes.

The way farmers obtain information, manage resources, connect with markets, and overcome obstacles has changed dramatically as a result of the usage of digital technologies in Indian agriculture. Farmers today have access to a multitude of information and tools at their fingertips because to the growing use of cellphones, internet connectivity, and digital platforms. Along with increasing the agriculture sector's overall production and efficiency, this digital transformation has also helped to empower farmers, especially those in rural areas.

**Objectives**

* To know about the initiative programs offered by Digital India for famers.
* To analyze farmers perception towards initiative programs of Digital India.
* To offer findings, suggestions and conclusion.

**Statement of Problems**

Right now, we live in a technological and digital world. The Digital India programme is one of the Indian government's key initiatives for the digital world. India is developing innovations and utilizing the power of modern technologies like intelligence, Internet of Things (IoT), and Big Data analytics to progress and modernise the agriculture industry. These innovative technological solutions will assist transparency and lessen operational inefficiencies. They are working tirelessly to modernise India's agricultural system and have made a major contribution to the development and digitization of the country's agricultural industry. In this study, the researcher attempts to identify the perception of former towards digital India initiatives.

**Digital India programme Initiatives for Farmers**

The government is taking highly proactive measures to boost farming activities with the help of the Digital India Programme. Initiatives related to digital India have improved farmers' access to essential agricultural data in rural areas. The government has established a number of web portals and mobile based applications for the free transmission of information on agriculturally related activities. All farmers can use this web portals and mobile based application at their convenience at free of cost.

Kisan Suvidha app offers data on five crucial factors - weather, input dealers, market price, plant protection, expert advisories, Pusha Krishi app informs farmers about modern technologies, Crop Insurance app gives information about insurance premiums and alerted areas, Agri Market app helps farmers to find out the cost of different crops at the big market close to them and India Weather delivers the current weather conditions as well as a 4-day weather forecast these are the mobile application initiatives for farmers.

Farmers' Portal is a one-stop shop where farmers may obtain information on a variety of subjects, including as seeds, fertilizer, pesticides, credit, best practices, dealer networks, and the availability of inputs, as well as beneficiary lists, m Kisan Portal is centralized portal allows officials and experts to send farmers individualized text and voice-based advice on a range of topics pertaining to agriculture and associated fields, Crop Insurance Portal offer comprehensive information about the Crop Insurance programme currently in place in the nation and Participatory Guarantee System Portal (PGS), this website promotes a collaborative approach to the nation's organic farming certification these are the initiative web portals available for farmers.

**Analysis**

**Percentage Analysis**

**Demographic Profile**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variables** | **Categories** | **Respondents** | |
| **Frequency** | **Per cent** |
| Gender | Male  Female | 107  43 | 77.33  28.67 |
| **Total** | **150** | **100** |
| Age | Below 30  30 – 40  41 – 50  51 – 60  Above 61 | 21  39  32  31  27 | 14  26  21.33  20.67  18 |
| **Total** | **150** | **100** |
| Educational Qualification | Illiterate  School Level  Graduation Level | 59  73  18 | 39.33  48.67  12 |
| **Total** | **150** | **100** |
| Farming Experience | Below 10 years  11 – 20  21 – 30  31 – 40  Above 41 years | 16  18  51  32  33 | 10.67  12  34  21.33  22 |
| **Total** | **150** | **100** |
| Monthly Income of the family | Upto Rs.10000  10001 – 15000  15001 – 30000  30001 – 40000  Above 40001 | 13  22  37  49  29 | 8.67 14.67 24.67 32.67 19.33 |
| **Total** | **150** | **100** |
| Education of the Family | One Person  Two Person  Three and more Person | 17  92  41 | 11.33 61.33 27.34 |
| **Total** | **150** | **100** |

It is inferred that 77.33 percent of respondents are male and 21.33 percent of respondents are between the age group of 41 – 50. Most of the respondents are educated in school level with 48.67 percent and most of the respondents have 31 to 40 years of experience on farming (21.33percent). 32.67 percent respondents get monthly income between 30001 to 40000 and 61.33 percent respondents have two educated persons in their family.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S.NO** | **Factors** | **W** | **5** | **4** | **3** | **2** | **1** | **W/A** | **Mean** | **Rank** |
| **R** | **1** | **2** | **3** | **4** | **5** |
| 1 | **Precision Farming Techniques** | No | 39 | 29 | 46 | 21 | 16 | **507** | **3.38** | **VII** |
| Ws | 195 | 116 | 138 | 42 | 16 |
| 2 | **Agricultural Extension Services** | No | 41 | 36 | 32 | 26 | 15 | **482** | **3.21** | **VIII** |
| Ws | 205 | 114 | 96 | 52 | 15 |
| 3 | **Access to Credit and Insurance** | No | 52 | 42 | 31 | 19 | 10 | **569** | **3.78** | **IV** |
| Ws | 260 | 168 | 93 | 38 | 10 |
| 4 | **Market Linkages** | No | 56 | 42 | 28 | 15 | 9 | **571** | **3.80** | **III** |
| Ws | 280 | 168 | 84 | 30 | 9 |
| 5 | **Weather Forecasting and Disaster Management** | No | 49 | 39 | 29 | 28 | 8 | **552** | **3.69** | **V** |
| Ws | 245 | 15 | 87 | 56 | 8 |
| 6 | **Improved Access to Information** | No | 61 | 39 | 26 | 17 | 7 | **580** | **3.87** | **II** |
| Ws | 305 | 156 | 78 | 34 | 7 |
| 7 | **Digital Payments and Financial Inclusion** | No | 54 | 36 | 32 | 13 | 15 | **551** | **3.67** | **VI** |
| Ws | 270 | 144 | 96 | 26 | 15 |
| 8 | **Direct Benefit Transfers (DBT)** | No | 76 | 34 | 23 | 11 | 6 | **613** | **4.09** | **I** |
| Ws | 380 | 136 | 69 | 22 | 6 |
| 9 | **Soil Health Management** | No | 32 | 37 | 21 | 29 | 31 | **460** | **3.07** | **IX** |
| Ws | 160 | 148 | 63 | 58 | 31 |

**Conclusion and Suggestions**

Farmers, NGOs, and government officials working together can successfully implement the Government of India's Digital India programme by taking a proactive and pragmatic approach. Farmers should receive appropriate instruction and knowledge at all levels. The government can take steps to conduct lots of workshops to educate and demonstrate about the technologies in most rural areas so that illiterates can also access the technologies.  The development of India has been largely dependent on its farmers. The goal of Digital India is to close the gap between those who have access to technology and those who do not by focusing on the needs of the impoverished and underprivileged. For the economy of India to grow steadily, farmers should be given priority. Because of this, there is still hope that digital platforms can enable Indian farmers' hopes to come true.