



## Review Article

# TRANSFORMATION OF INDIAN AGRICULTURE WITH DIGITAL MARKETING

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**Abstract:** Agriculture is the primary source of livelihood in India and India is the largest producer of several agricultural commodities. As the production is increasing, there is a dire need to expand, upgrade and innovate the means of marketing, marketing channels and marketing strategies. Today, digital marketing has emerged as one of the prime factors deciding the success or failure for many companies. Considering the need for and importance of digital marketing in agriculture, Government of India took several initiatives and launched programs and portals like eNAM, AgriMarket App to facilitate and encourage the stakeholders to effectively use the resources and digitally connect with each other. It is helping the rural and urban farmers to connect with the substantial number of buyers and customers and display the quality and range of products and services which help to generate more leads and revenue. There are many digital platforms which help the entrepreneurs, startups and progressive farmers for digital marketing. Along with the platform, there are certain tools and techniques with which one can strategically connect with specific set of customers. Digital marketing provides lot of benefits and opportunities to explore new markets and reach a global marketplace. There are a few infrastructure and connectivity issues in rural areas in accessing digital marketplaces. By overcoming the challenges, many agri companies can take the benefits of digital marketing to boost the growth in business. Startups and companies like AgroStar, Netafim and Ninjacart are already on job. This new intervention is paving way for stronger agricultural development in India.

**Keywords:** Agriculture Marketing, Digital Marketing and tools, Startup, Social media, Innovation

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## Introduction

India is one of the largest producers of the food and agricultural products in the world. India ranked 6<sup>th</sup> in the world in terms of grocery and food markets. It contributes 70% of the sales. Indian farmers produce agricultural products, which are used for domestic consumption and for export too. India has a huge capacity in agriculture production there are so many activities involved in this process starting from purchasing inputs like seeds, fertilizers, etc. up to the harvesting of produce and selling it. That means the starting and end processes in agriculture are linked with marketing. Marketing is the key activity on which the profit and loss of the product depends. Offerings, which have value for customers, clients, partners, and society as a whole, are created, communicated, delivered, and exchanged through marketing. Previously, billboards, pamphlets, TV and Radio were used for marketing. Nowadays the picture of marketing is different. This era is called as digital marketing era where E-commerce websites, Social Media Marketing, Paid Advertising or Pay Per Click (PPC), Content Marketing, Search Engine Optimization (SEO), and many more technologies are used to market products or services. In 2019, digital advertising revenue increased by 26% compared to 2018 to reach Rs. 13,683 crores, where the overall advertising growth was 9.4% as per the report by Dentsu Aegis Network. As per the report of Global Data, the digital marketing sector is booming and expecting to grow at 27% in 2020 to cross the 17,000 crores mark. In 2020, India has around 700 million internet users, and the numbers are expected to grow to over 970 million users by 2025 ([www.globaldata.com](http://www.globaldata.com)). There will be almost 666 million active internet users in India by 2023. The Indian e-commerce market is pushing to seven trillion rupees by 2023 because of lockdowns. The number of internet users is expected to reach 800 million by 2021 [1]. Digital Marketing can be considered as a major contributor in the success of the companies like Amazon, Flipkart, AgroStar, Dehaat, Ninja cart etc. It is anticipated that Digital Marketing will boost agricultural production and growth of the agricultural market.

## Digital Marketing

All marketing initiatives that use an electronic device and the internet are referred to as digital marketing. Companies are using social media, direct email, search engine optimization and interactive websites to attract potential customers, engage them and convert into a business deal. It is easier to reach a larger audience through digital marketing than through traditional methods as well as target the prospects who are most likely to buy product or service. It is also often less expensive than traditional advertising, and it allows to track the progress on daily basis [2].

## Need Digital Marketing in Agriculture

In India, the number of internet users expected to grow over 970 million by 2025 [1] It shows how the population of internet users is increasing tremendously. Ultimately the use of digital platforms already increased. It is great opportunity to farmers to connect directly to the customers. It is particularly important to small holder farmers who sell their goods directly. It will help them to increase profits by removing middleman's commission and display wide range of fresh produce to the customer i.e., direct buyers, restaurants, chefs etc. Digital marketing also offers a chance to receive feedback about buyers work and to discover more about what the target audience genuinely requires [3]. Understanding the need for and importance of digitalization and digital marketing in the field of agriculture, Government of India came up with innovative initiatives like Digital India and different online portal i.e., e-NAM particularly for the trade of agricultural produce.

## Government initiatives to encourage Digital Marketing in agriculture

Several initiatives taken by government to encourage digital marketing in agriculture. Those Government initiatives are as follows:

### e-NAM

National Agriculture Market (eNAM) is a pan-India electronic trading portal which

networks the existing APMC mandis to create a unified national market for agricultural commodities. Agribusiness Consortium for Small Farmers (SFAC) is leading eNAM implementation under the Ministry of Agriculture and Farmers' Welfare, Government of India. The vision of the portal is to promote uniformity in agriculture marketing by streamlining of procedures across the integrated markets, removing information asymmetry between buyers and sellers and promoting real time price discovery based on actual demand and supply (<https://enam.gov.in/web/>). e-NAM platform now has total No. of 1000 mandis across 18 states and 3 union territories. According to the ministry, 1,660,00 farmers, 1,311,000 traders, 73,151 commission agents, and 1,012 FPOs have registered on e-NAM over the past four years [4].

### National mission on Agricultural Extension and Technology

The objective of the Scheme is to make the extension system farmer-driven and farmer-accountable by way of new institutional arrangements for technology dissemination. To facilitate delivery of appropriate technologies and improved agronomic practices to farmers, it aims to restructure and strengthen agricultural extension. This is envisaged to be achieved by a judicious mix of extensive physical outreach and interactive methods of information dissemination, use of ICT, popularisation of modern and appropriate technologies, capacity building and institution strengthening to promote mechanisation, availability of quality seeds, plant protection *etc.* and encourage aggregation of Farmers into Interest Groups (FIGs) to form Farmer Producer Organisations (FPOs) [5].

### AgriMarket app

This application is developed by the IT department of Ministry of Agriculture in the country. It is intended to keep farmers informed about crop prices and discourage them from conducting distress sales through the mobile application. With the AgriMarket Mobile App, farmers can access information about crop prices within 50 km of their own device location. This app consequently captures the area of the agriculturists utilizing versatile GPS and brings the showcase costs of crops which drop inside the extend of 50km. The prices of agri commodities are sourced from the Agmarket portal. Currently, the app is available in English and Hindi languages.

### E-governance efforts

The government has put in operation three portals *viz.* farmer portal, Kisan call center and Kisan portal to help farmers make informed decisions for efficient farming under varying agro-climatic conditions. Under the e-Governance program, soil health card software has been standardized and web-based software developed to provide integrated nutrient management recommendations using the soil test crop response method.

### AGMARKNET

AgMarknet portal is a govt. of India portal on agricultural marketing backed by a wide area information network connecting agricultural markets, State Marketing boards/Directorates and providing linkages to the websites of the important National and International Organisations. The portal is taken into consideration as an important flagship of the Government of India Schemes and efforts are afoot to make it of actual use/provider to the farmers. About 2700 markets are reporting data every month. Information linkages were provided to Farmer's portal, Mkisan portal, Nokia, BITCOE, IKSL, a Cooperative Sector company, has been involved in disseminating the price information to a large network of farmers cooperatives, Public sector banks, commodity exchanges, newspapers, *etc.* are using the site for publishing the data on prices of agricultural commodities apart from other international organizations. It links around 7000 agriculture wholesale markets in India. Portal is in 8 regional languages and English. More than 3200 markets are covered under this with more than 350 commodities [6]. Along with the government initiatives if an entrepreneur takes the help of digital platforms like e-commerce websites, social media marketing, and paid advertisements, content marketing, Search Engine Optimization (SEO) through which he can reach large number of audiences this will again reflect in his lead generation and simultaneously increase in revenue.

### Digital Marketing Platforms

There are several Digital Platforms are present today which will help farmers to start Digital Marketing for their agri produce. Those Digital Platforms are as follows:

#### E-commerce Website

e-Commerce platforms are gaining strong momentum. Developing an e-commerce website is the best way to boost sales for any agribusiness as the prospects can explore and understand the business right from the comfort of their homes. Seller can display your entire range of products and services for people to view and buy on the website. This can prove to be very lucrative for the business as there are not many agribusinesses with e-commerce websites. Entrepreneur should pick a good digital marketing agency that offers web development services to help with the same. The website will help entrepreneur reach a wider audience and generate brand awareness [7].

#### Social Media Marketing

There are so many social media platforms present today to connect with right type of customers to promote the brand and showcase the range of products and ultimately generate leads and boost sales. Social media platforms like, LinkedIn, Instagram, WhatsApp, Facebook which are prominently used [8].

#### Paid Advertising or Pay Per Click (PPC)

Pay-per-click (PPC) is an advertising model that lets advertisers place ads on a promotion stage and pay the have of the stage when their publicize is clicked. Advertising services like Google Ads and Microsoft Advertise operate with real-time bidding (RTB), where advertising inventory is sold in a private automated auction using real-time data [9].

#### Content Marketing

Content marketing is a marketing strategy used to attract, engage, and retain an audience by creating and sharing relevant articles, videos, podcasts, and other media. This approach establishes expertise, promotes brand awareness, and keeps your business top of mind when it is time to buy what one sell. Content marketing is the development and distribution of relevant, useful content like blogs, newsletters, white papers, social media posts, emails, videos, and the like to current and potential customers. When it is done right, this content conveys expertise and makes it clear that a company values the people to whom it sells. The consistent use of content marketing establishes and nurtures relationships with the prospective and existing customers. When the audience thinks of a company as a partner interested in their success and a valuable source of advice and guidance, they are more likely to choose the same company when it is the time to buy.

#### Search Engine Optimization (SEO)

In layman's terms, Search Engine Optimization or SEO is essentially tweaking the website so that it comes up naturally or organically for search results in Google, Yahoo Bing, or any other search engine. Google's algorithms are updated on a regular basis to ensure that only the most relevant results are displayed. Experts have indicated that SEO is dead, and the effort is pointless. However, the fact is that Google attempts to save you set of rules manipulation and filters webweb sites that don't should be at the pinnacle of SERPs (Search Engine Result Pages). So, there is no doubt anyone should invest in SEO work. The technicalities of content and query matching, spidering, indexing, and interpreting non-text content should be addressed on the entrepreneur's website [10].

#### Tools used for Digital Marketing

Various tools are used for Digital Marketing which influences effectively of the initiatives, taken up and they can be broadly categorised as follows:

##### Social media platforms and Influencers

**a) Twitter:** Twitter is a quick-paced platform this is best for sharing the state-of-the-art developments or the business's tackle contemporary events.

Its audience skews somewhat younger but is split evenly between men and women. Hashtags of trending topics can be used for interactions and conversations. These hashtags allow to reach new potential customers in the industry. Twitter can also be used to monitor positive and negative reactions from existing customers, and one can use the platform to provide additional customer service [11].

**b) Instagram:** It is owned by Facebook; Instagram boasts more than 1 billion monthly active users and has the same advertising options as Facebook. Primarily, it is a visual platform, which provides an opportunity to showcase the business's personality [11].

**c) LinkedIn:** This platform is known as the primary social networking platform for professionals. One can use LinkedIn to update customers on the business, connect with industry partners, and recruit new team members. As a professional network, it is the top choice for B2B social media marketing. "LinkedIn is one of the best platforms for generating leads," according to Forbes, "and now accounts for 46 percent of social media traffic generated to company websites for B2B firms" [11].

**d) Facebook:** With greater than 2.27 billion energetic month-to-month users, Facebook is primary desire for any business. Through Facebook Ads Manager, one can target users based on their location, age, gender, and level of education, relationship status, job title, interests, purchase behaviour, device usage, and so much more. And in addition to that Facebook allows to create Custom Audiences to reach current customers. Custom Audiences can be created from the phone numbers or email addresses by Collecting, or from Facebook Pixel to target people who have visited the website [11].

**e) Pinterest:** Pinterest is a visual platform. Pinterest allows the business to show off product offerings, before-and-after images (great for home improvement, beauty, and cosmetic surgery industries), and curated pin-boards [11].

**f) YouTube:** YouTube allows the business to post and share an unlimited amount of video content, which one can then share on social media, send via email, or embed on the website. As a product of Google, there is also an added Search Engine Optimization (SEO) benefit of having a YouTube channel and producing video content on the platform. With more than 1.8 billion lively month-to-month customers worldwide, YouTube has basically grown to be the second one biggest search engine in the back of Google. When it comes to paid advertising on YouTube, it takes the lead over Facebook for video [11].

**g) Influencers:** Print media, Audio-Visual media are the best tool to attract customers. Such Media display content or idea behind the product or service quickly to the customers. Right Relevance is one of the tools which Improve the engagement by finding and sharing authoritative content currently trending on social. RightRelevance mines the social web to identify and rank topical influencers, to find the most relevant and trustworthy content and help to start or engage in meaningful and impactful conversations.

## 2) Managing social media updates

a) Hootsuite is a social media management platform, and as it helps to manage social media channels. Anyone can use it to delegate tasks with other users, making it a great option for a team platform.

b) Buffer is a content publishing platform, helping in publish and schedule content to social networks [12].

## 3) Reviewing brand mentions and the latest developments in the industry

### a) Google Alerts

Google Alerts are a free notification service provided by Google that sends emails to subscribers that summarize the search activity around search terms.

### b) Talkwalker

Talkwalker delivers the social insights that help brands build growth. Talkwalker's

listening and analytics tool enables more than 2,000 companies worldwide to protect their brands, measure their impact and gain the key consumer insights that drive purchase decisions.

### c) Feedly

Feedly is a robust feed reader that aggregates information from around the web into one convenient place. It is used to view updates on any topic, whether it come from the news, blogs, social media posts, RSS feeds, or other sources.

The essential good thing about a bolster peruser like Feedly is that it gives all the information in one single put instead of having to visit each site, web journal, etc., to urge overhauls.

## 4) Understanding customer search behaviour

### a) Google Trends

Google Trends is a free data exploration tool that helps businesses learn what their users are interested in and inquisitive about in real time. Many marketers use this data to gain insight into customer behaviour. This allows to see how interest in a topic has changed, what terms are related to the topic, and even when interest in a topic tends to peak or diminish annually (Anonymous, 2020).

### b) Ubersuggest

Ubersuggest is a free chrome extension and a powerful Search Engine Optimization (SEO) tool that shows keywords monthly search volume, CPC & competition data. The Ubersuggest extension will not only provide insightful data related to a specific keyword query on Google but also on sites like YouTube, Amazon & more.

## 5) Understanding overall online marketing effectiveness

### a) Google Analytics

Google Analytics gives the free tools one needs to analyse data for the business in one place. Analyze information rapidly and empower collaboration with an easy-to-use interface and shareable reports. Process and share huge amounts of data in a snap, while using configuration APIs to keep things flexible and fully programmatic (<https://en.wikipedia.org>). Analytics also offers built-in technical support and a global infrastructure that delivers secure, accurate data across sites and apps while staying fully under control.

## The benefits of the digital marketing channels for agribusiness

Digital Marketing allow to explore new markets and reach a global marketplace. It requires less money than traditional marketing methods. It enables to track and measure the marketing efforts. It helps to build a relationship with the customers which in turn helps in building customer loyalty. It Allow to personalize the website with offers and coupons with the help of the customer database. It Provides access to modern farming methods and techniques [7].

Digital marketing technologies allow the Consumers to stay updated with products or services. With digital marketing, consumers can engage with the company's various activities. Customers can visit company's site, examined data approximately the items or administrations, and make buys online and give feedback. Through digital marketing, consumers get clear information about the products or services. There is a little chance of misinterpretation of the information taken from salesperson in a retail store. Moreover, with various authentic sources available online for product information, customer can carefully take informed decision. Through Digital Marketing most of the companies are promoting their products, hence, it is becoming the greatest advantage for the customer in terms that they can make comparison among products or services by different suppliers in cost and time friendly way. Since internet is available all day long; there is no time restriction for when customer wants to buy a product online [10].

## Challenges of implementing digital marketing in agriculture

**Infrastructure Issues:** While India has made significant development in terms of infrastructure in other sectors, the support in the agribusiness sector is sub-par and lacking behind most of the economies [13]. **Connectivity Issues:** Broadly, there are 106 web supporters per 100 individuals in urban ranges compared to fair 30 in country ranges. This gap is seen across telecom circles.

In urban areas, there are more than 100 internet subscribers per 100 people in 12 telecom circles. This figure is more than 80 in six others. But in rural areas, this figure is less than 60 in all circles except the rural parts of Delhi region. Reluctance to switch to new methods and alternate channels: Several efforts are taken up to introduce new farming technologies, however, it has always been a challenge to give away the traditional practices and implement newer technologies. The underlying cause in the back of that is that they had been now no longer capable of marketplace their merchandise themselves and feature had an extended operating dating with the middlemen and agents, despite the fact that the latter earns greater and eats up large earnings of the former [13].

### Case studies

#### AGROSTAR

AgroStar was established in 2013. They have developed a digital platform through which farmers can directly procure the required agri input at fair prices. This platform can be accessed by mobile phones. The Startup aims to simplify the Agribusiness experience of farmers through smart and innovative uses of technology developed by them. A farmer connects with AgroStar either through a missed call on a toll-free number or through an 'AgroStar' android app. AgroStar's cleverly prescient dialler interfaces qualified client relations official with the agriculturist. The executive understands his query and provides him with personalised agronomy and product solutions based on his crop cycle and places an order on behalf of the customer with the aid of a smart Customer Relationship Management (CRM). Delivery channels like India Post, local entrepreneurial logistics partners or field sales executives are deployed to dispatch the agri inputs required by farmers at their doorstep. The products are stocked and maintained at central warehouse facility. AgroStar is changing the Indian agribusiness retail scene through the correct and imaginative utilize of innovation and information with a center on client fulfillment. It has grown over 300% in the last two years (AgroStar case study, 2018). AgroStar has experienced a transformational journey from one missed call to over two million missed calls and has served over four lac farmers across Gujarat, Maharashtra, and Rajasthan within two years. More than 150 presumed agri brands over the input categories of seeds, edit security, edit sustenance and equipment have collaborated with AgroStar. Nearly four lakh unique farmers have experienced AgroStar's services. 3 out of 10 farmers who have transacted with AgroStar have access to What'sApp.

#### NETAFIM India – FlexNet

NETAFIM India wanted to launch FlexNet flexible pipes through digital, create awareness, showcase value proposition, and wanted to drive traction for the product. So, to launch the product on digital, they crafted a communication campaign, #FarmingSimplified which focused on positioning the thought, now farming is simplified through FlexNet pipes, and it allows more flexibility to farmers compared to the traditional method of using pipes.

The campaign started with teasers raising questions

- Can farming become simpler?
- Can there be a cost-effective way to do farming?
- Can farming be more innovative?

Post teasers, they revealed the FlexNet film which communicated what value the product brings in, including performance, durability, flexibility, the ease with connectors, and low labour cost for an entire irrigation system. They further delayed a multi-lingual strategy to launch the product in different regions of India

The Impact of the digital campaign was they reached to 5.6 plus million viewers. 2.1 plus million people were engaged in the campaign and they got 1855 leads through the campaign [14].

### Conclusion

Digital Marketing has changed the way to connect with people, communicating the idea behind the product and services, explaining the value and usages of the product and services, it is a matter of one second to explore the offering with people but for that one can have a great plan and strategy to get success in that. With the increasing literacy in rural areas and growth in the agricultural infrastructure, it is observed that the agribusiness sector is gradually moving to the

digital platform as well. The agripreneurs and agri startups are seen effectively using the Digital Marketing to reach the desired customers. In the process, they are better able to convey the company values to their customers and other stakeholders. Various free/paid tools and techniques are making it further convenient for them. In a time to come, one can get great results linking digital marketing with agriculture. Even Central and State Governments are using the Digital marketing to reach to farmers, agripreneurs and other departments to effectively share the information on schemes, projects, beneficiaries etc. With all stakeholders using the Digital technologies and tools, Indian Agriculture sector is bound to transform.

**Application of research:** The article helps to understand interventions of digital tools used for marketing in agriculture sector with reference to government of India and private sector (Startups) initiatives.

**Research Category:** Digital Agriculture, Transforming Agribusiness

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