THE ROLE OF SOCIAL MEDIA IN RURAL DEVELOPMENT – A STUDY IN TELANGANA STATE

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Abstract

Digital technologies encompassing social media have changed our way of life and brought in countless benefits such as greater convenience, quicker communication, access to information, social connectedness and new types of leisure. This study investigates the role of social media platforms in rural areas of Telangana. The research study design is descriptive and has used cross-sectional survey method. People living in the villages of Telangana are the targeted population, and the villages are the sampling units. Nine hundred respondents from 30 villages spanning 30 districts are surveyed. Farmers using social media seek information on weather, government policies and plans in agriculture, and availability of best quality seeds and fertilisers. The facility also helps them connect with experts to resolve their problems and delivers educational and training information. The number of people using social media for marketing agricultural produce and sharing farming practices is still on the lower side. People in rural areas use WhatsApp/Facebook for sharing farming/business-related information. The potential of social media platforms remains unexplored; if used optimally, it can prove beneficial.

Keywords: Social Media, Rural Development, Telangana.

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Introduction

Social media allow users to access and create information through social networking sites. Many people use them to build and establish connections. The most popular activities are communicating with existing networks, making an displaying, online presence, creating and customising content profiles, and findina information. Online networking sites provide a simple platform that allows one to remain linked to the right people or groups to expand their networks. Networking sites offer great advantages to people, which should be leveraged with caution.

India has 70 per cent of the population in rural areas. Rural income plays a vital role in the growth of the economy. However, it is noted that the average rural income is less than half of the average urban income. In this regard, the Government of India has launched a range of programmes and schemes that lead to rural development. Rural development can be summarised as the process of building the capacity and ability of rural people to make optimum use of all available resources by taking control of their cultural, environment for socio-economic, educational and political growth. Even today, many rural areas face issues like agricultural problems, farmers' suffering, sanitation problems, public health care, poor quality of education, poor standard of living, etc. Social media have the utmost potential to affect rural people's lives and address various issues - from their livelihood to their healthcare, education to employment, traditions to social campaigns, etc. Currently, rural zones are benefiting from digital technologies, but only discreetly about their potential. We can make real progress only with rural development as most of the population lives in rural areas. It is essential to use social media for rural development strategically.

According to the latest report by the Internet and Mobile Association of India (IAMAI) and the Nielson survey, rural India has 2.27 million active Internet users. At the same time, there are 2.05 million active Internet users in urban areas. This is a positive indication of relying on the Internet to improve rural development activities. As the rural population is linked to the Internet and the use of social media is strong, social media plays a vital role in rural development, mainly in agriculture, education, health and rural employment sectors. The present study aims to underpin different aspects of social media usage that will foster rural development.

Literature Review

Social networks can contribute to the overall well-being of communities. Eagle, Macy & Claxton (2010) found that "the structure of social networks and related diversity of relationships is strongly correlated with the economic development of communities." Nevertheless, with the dynamic changes in information technology, it is essential to incessantly review and examine social media and social networking usage in community development. Social media can influence many individuals, thus raising awareness of various issues pertaining to social development and economic well-being, especially in rural areas. The information posted on social media platforms is often exclusive and engaging, perhaps more significantly, participatory. The content creator can seek feedback from the audience easily.

Social media usage among researchers, professionals, and other stakeholders in the agricultural sector has been on the rise (Sokoya et al., 2012). Evidence shows that social media has changed the lives of rural people. It also helps research and extension organisations in opinion mining to comprehend farmers' apprehensions, difficulties and issues and assess their attitudes concerning agricultural facets. Rai & Shahila (2013) mentioned in their study that agricultural journalism makes the farmers in India literate. Social media played a crucial role in educating rural people about rural politics, online trade, and networking. Social media development is also a social responsibility for developing rural areas and people (Ekta Bansal, 2015). Availability of information technology at nominal rates will result in the macro socio-economic development of rural areas.

Samar, Ali & Muhammad (2016) pointed out the need for the government to educate people in rural areas to adopt new technology for rural development. This study puts forth the development of customised policies for digitally excluded rural communities and poor connections. The output of the paper by Yin, Chen and Li (2019) is the comparison between rural and urban innovation community-based network & intermediary platforms, institutional & and management innovation.

Although social media is relatively new to various sectors, people did not lose interest across industries. This enabled the industries to meet their business needs. In the healthcare sector, healthcare providers have a chance to reach their patients and communicate about their problems quickly and easily. These providers are creating awareness programmes to make people aware of the various health issues. Similarly, individuals are now shifting to social media to know and apprise decisions regarding health issues like choosing a hospital, doctor, or medical facility. If rural hospitals fail to provide the required facilities, patients have to travel to urban areas to receive medication. The digital solutions in the healthcare industry are bridging the gap in facilities. Telemedicine facilitates doctor's consultation over a mobile phone using the video link or digital voice, replacing in-person consultation. This could allow doctors to treat additional patients, thus addressing the shortage of doctors in rural zones. The emergence of high-speed digital connectivity and the spread of mobile phone technology has benefited millions of poor and rural Indians.

The introduction of the government's Digital India initiative in July 2015, hand in hand with broadband connectivity in rural areas, led to the growing Internet penetration in recent times. This development increased India's digital population, with approximately 560 million active users as of January 2019. More than 1,10,000 Gram Panchayats have been linked via optical fibre (McKinsey report, 2019). The users in urban as well as rural areas have consistently increased V. Rama Devi and Merugu Venugopal

over the years. This was expected to cross 600 million shortly. It is estimated that India's Internet users will touch 666.4 million by 2023 (IAMAI report, n.d.). In India, Internet penetration in urban areas is about 63.85 per cent, whereas, in rural areas, it is 20.26 per cent. Though the penetration in rural areas is less than urban areas, the rural areas' Internet penetration has grown from 18 per cent in the same year. Most of the research reports claim that the upsurge in Internet penetration in rural and urban areas is because of the rising usage of social media channels (Ascent Brand Communications Pvt Ltd, n.d.)

The popularity of social media platforms was primarily due to individual users who started networking among themselves (Sitaram, 2012). Technology, viz. Web 2.0 has radically broadened our insight into the online world. With the advent of social media platforms like YouTube and Facebook in 2005, and Twitter in 2007, a considerable number of individuals across the globe have acquired the ability to connect and more outstandingly, generate and share their content without much exertion, and that too in a timely fashion. "Massive participation in these social networks is reflected in countless videos, comments, news, and status updates constantly posted and discussed on these social media websites" (Sitaram, 2012).

As the usage and participation in social media websites and apps are increasing in urban areas, usage levels on mobile devices and social media in rural areas have also increased. Today, even an average user from rural India communicates using mobile device multiple times a day. This scenario, together with the rise in social media usage, has helped individuals access information, communicate with people around the globe, and facilitate ease of doing business. Many firms are investing profoundly in social media targeting untouched markets, especially in rural areas. According to the report by Boston Consulting Group, The Internet users in a rural population consist of half of India's Internet users, covering villages and small towns. By 2025, Indian Internet users are estimated at 850+ million. The increase in Internet users would lead to a rise in social media usage and even boost online commerce, significantly improving the use of digital channels in small towns and villages in rural India.

There is an important opportunity to share knowledge economically and efficiently without consuming much time rather than the old-style ways of demonstrating farms, agricultural shows, workshop events and the farming press. "The embracing of the Internet to connect with consumers and provide information about production methods can modify the perception of the firm and its products" (Martin & Matlay, 2003; James & Hopkinson, 2005). Social media might offer data to update current rural debates, for example, how it may allow 'truths' about food production to be communicated (Rodak, 2020), host deliberations about animals welfare (Wonneberger et al., 2020), and apprise the wideranging politics of the rural (Schuler & Truong, 2019). Roche et al. (2020) considered how social media might be part of a set of information sources used by dairy farmers to get information on dairying issues. While they note that social media may be an 'emerging source' of information, its usage remains low compared to the more conventional sources of dairy producer organisations, other producers, and magazines or newspapers.

Majority of the young farmers favoured social media, viz. YouTube, WhatsApp and Facebook for receiving agricultural information. Young farmers have subscribed to agriculture-based channels on YouTube to receive field-related information. They maintained 4-5 WhatsApp groups to share and receive information on agriculture and related fields. They observed that the use of social media substantially impacts crop management practices (Singh et al., 2021). Farmers may use Twitter to share examples of sustainable soil management practices and how these may enhance other forms of peer-to-peer exchange (Mills et al., 2019; Skaalsveen et al., 2020). It is found that certain 'influencers' might be substantial in spreading information on a specific theme, with a recommendation being that social media might be

more aggressively used. Nevertheless, fears are pervasive because of distortion of information, trolling and quickening volume of messages (Morris & James, 2017).

There are numerous success stories on how social media was used to address various issues of rural people. It is also essential to look at the multiple platforms that have supported rural India by positively impacting the lives.

Gram Vaani: Mr. Tandon is the creator of Gram Vaani, an organisation that provided "social media for rural India which is a voice-based social network that connected many families and farming communities existing in villages" (Ghedin, 2013). According to Mr. Tandon, "the 60,000 Gram Vaani users would not want to make any payments; they merely dial numbers, leave voice messages and listen to the ones left by others." The topics discussed are relevant to the community, such as local updates, agriculture issues, government announcements and schemes.

Sangli Turmeric Story: Although many Indian villages suffer from irregular electricity supply and poor Internet connectivity, there are still success stories where Facebook assisted in transforming rural people's lives. A report published in The Economic Times dated 10th February 2012 from Sangli district of Maharashtra says prices went down inordinately in the local market due to the excessive supply of turmeric. Using Facebook, a local farmer connected with other turmeric farmers across the country and deliberated the condition and the prices. They took a call not to take part in the local auction. Social media was utilised to disseminate information, and 25,000 turmeric farmers of Sangli resorted to boycotting. The boycott aided the farmers as the prices doubled (Rai & Shahila, 2013).

Snapdeal.com Nagar: Shivnagar is a village in northern India renamed Snapdeal.com Nagar due to its motivating and appealing purpose. The website that offers daily discounts exhibited a generous act of social good by using the money for a reasonable cause. The small village lacked proper water facilities, so villagers had to walk for a

more than 15 hand pumps and transformed thousands of life" (Rai & Shahila, 2013). Thus, congregated efforts of a modest deals and discounts site helped in getting water to the doorsteps of villagers.

Based on the literature review, only a few research studies are conducted on the role of social media in rural development. There are success stories that highlight the role of social media in many ways contributing to rural development. Hence, a need is felt to study various dimensions of the use of social media in rural areas to get real insights and understand whether the potential of social media for rural development is optimally used.

Objectives of the Study

- 1. To determine the purposes of using social media platforms in rural areas in Telangana
- To study the association between the socioeconomic & demographic factors of the people, and the use of social media in rural areas
- To determine the relationship between social media usage dimensions and intention to use
- To explore the usage of social media by examining certain important Facebook pages/WhatsApp groups

Methodology

The research study design is descriptive and has used cross-sectional survey method. People living in the villages of Telangana are the targeted population, and the villages are the sampling units for the study. Telangana State is classified into 31 districts, and each district is further classified into different villages using multi-stage sampling. Hyderabad district does not have villages. One village from each district of the State was selected using simple random sampling. Nine hundred respondents from 30 villages spanning 30 districts were surveyed through convenience sampling.

Demographic Details of Respondents

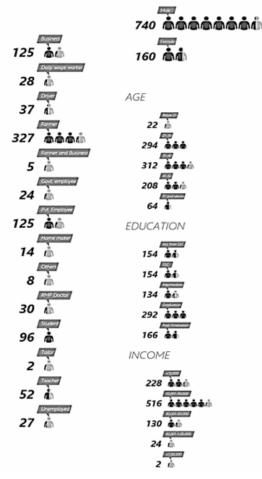
The study's diverse respondents include farmers, business owners, daily wage workers, drivers, government employees, private employees, RMP doctors, students, teachers, tailors, unemployed, politicians, magicians, and priests.

Figure 1

Demographics of Respondent

OCCUPATION

GENDER





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Data Collection Instruments and Procedures

A structured questionnaire was designed based on an extensive literature review, and data was collected with the help of the questionnaire designed for the study. The questionnaire consists of three sections. Section 1 deals with the respondents' demographic details, and Section 2 includes questions relating to infrastructure for accessing social media. Section 3 consists of questions addressing different aspects of social media such as usage of social media, platforms, frequency of usage, purpose of using social media, different dimensions of the use of social media perceived ease of use, perceived usefulness, perceived compatibility, perceived behavioural control, trustworthiness, social influence, availability of resources, intention to use & recommend to use and the challenges involved. The questions were framed by taking the objectives of the study into account. The period of the study was one year, i.e., 2020.

For testing the reliability of the data, Cronbach Alpha (α) is applied. Table 1 gives the alphavalues of various dimensions included in the study. From the table, it is observed that the reliability of various dimensions is greater than 0.70. The values show that the reliability is good and highly acceptable.

Table 1

Alpha	Valu	les o	۴D	imensi	ions o	f S	Social	Μ	ledia	Usage
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Dimensions of Social Media Usage	Alpha
Perceived ease of use	0.906
Perceived usefulness	0.918
Perceived compatibility	0.750
Perceived behavioural control	0.868
Trustworthiness	0.846
Social Influence	0.710
Availability of resources	0.781
Intention to use	0.814
Recommend to use	0.786

Data analysis: ANOVA, Correlation and descriptive statistics are used for statistical analysis using SPSS.

Results & Discussion

Resources Required for Using Social Media: To use social media, people should have proper net connectivity, Wi-Fi connection/ mobile data, smartphone/laptop/desktop, etc.

Among the respondents, 43.78 per cent have two mobile phones, 29.56 per cent have three mobile phones, followed by 16.44 per cent having four or more mobile phones and 9.78 per cent having one. While, 90.78 per cent use smartphone, 9.22 per cent do not use it.

About 90 per cent of the respondents have 4G network-enabled mobile phones, 7 per cent have 2G network, and 3.11 per cent have 3G network.

Majority (96 per cent) of respondents do not have Wi-Fi connection at home. They use smartphones to access social media. According to Synovate (2009), mobile phone drives rural Internet access and usage. Majority of the respondents (90.78 per cent) in the current study use social media. This is in conformity with another study, which revealed that most respondents have social media accounts (Balakrishna & Deshmuk, 2017).

Social Media Participation: Out of a large number of respondents using social media platforms (91 per cent), 42 per cent frequently visit social media accounts, and 23 per cent see them often. Interestingly, 43 per cent spent more than 8 hours weekly on social media sites. Most of the respondents (43 per cent) listed that their family have two phones, followed by three phones (30 per cent). This indicates that most rural people in Telangana have access to mobile phones and are actively engaged in social media.

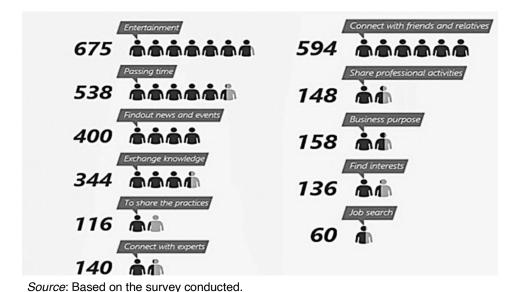
Preferred Social Media Platform: The study listed WhatsApp as the most favoured (59 per cent, ranked 1) social media platform by a vast majority of respondents. It was followed by YouTube (37 per cent, ranked 2) and Facebook (28 per cent, ranked 3). Respondents who use WhatsApp and Facebook for business or agricultural purposes have their village, family, or group of customers (in the name of a company). Most of the contents shared in

these communities are related to their products. Respondents use social media sites such as WhatsApp/Facebook for posting product information. A few respondents captured videos or images and posted them on social media. Interestingly, they are adopting practices they have seen on social media.

Reasons to Use Social Media: Entertainment (Kaye & Johnson, 2004; Ferguson & Perse, 2000; Ko, et al., 2005; Ruggerio, 2000; Charney & Greenberg, 2002; Papacharissi & Rubin, 2000), connect with friends and relatives (Bumgarner, 2005; Charney & Greenberg, 2002; Kaye & 2000; Parker & Plank, 2000; Ruggerio, 2000), and passing time (Ferguson & Perse, 2000; Bumgarner, 2005; Papacharissi & Rubin, 2000; Ruggerio, 2000; Charney & Greenburg, 2002) are significant reasons for using social media in Telangana rural areas as evidenced by the survey responses. People use social media for various purposes, such as entertainment, information access, and development and maintenance of relationships (Park, Kee, & Valenzuela, 2009). Other notable social media activities were news and events, exchange of knowledge, and business purposes (Figure 2).

Figure 2

Reasons to Use Social Media



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Farmers use social media mainly for weather information, government policies and plans in agriculture, availability of best quality seeds and fertilisers, connect with experts to address their problems and educational & training information. The number of farmers using social media for marketing agricultural produce and sharing farming practices is still on the lower side. Those who use social media to acquire information about credit facilities, sources, and terms and conditions are limited in number. "Most of the farmers seem to have little interest in using social media for marketbased agricultural information, including market trend, price, and stock availability as well as credit facilities, source, terms and conditions" (Synovate, 2009).

Table 2

Use of Social Media for Sharing Farming-Based Information/Business Information

Response	Frequency	Percentage
No	703	78.1
Yes	197	21.9
Total	900	100.0

Source: Based on the survey conducted.

About 22 per cent of the respondents use WhatsApp/Facebook to share farming-based information/business information, as shown in Table 2. Rampet farmers, Village Taralapally, Annadata group, Annadata, Rashi fertiliser, Bighot groups, Jai Kisan, Raithe Raju, Trend farmers, Yuva Jana youth, Modern Agriculture, Satyam Shivam, Raithu Balam, Raithu Barosa, Raithu Nestalu, Raithu Mitra are some of the WhatsApp groups created for sharing farming practices, issues, new farming methods & techniques, usage of chemicals, fertilisers & seeds and modern technology infarming. Certain business groups are also formed for marketing and other business purposes.

Table 3

Use of Social Media to Sell Products

Sources	Frequency	Percentage	
Facebook	15		
Facebook and WhatsApp	24	2.7	
Olx	04	0.4	
WhatsApp	38	4.2	
Not using social media	819	91.0	
Total	900	100.0	

Source: Based on the survey conducted.

It is observed from Table 3 that 91 per cent of respondents do not use social media for selling

their products. A few of them use Facebook and WhatsApp to sell their products.

Table 4

Use of Agricultural Technologies, Schemes, Good Practices Disseminated

Use of agricultural technologies, good practices disseminated	Frequency
Yes	83
No	244
Total	327

Source: Based on the survey conducted.

Among 327 farmers who are part of the survey, 83 respondents (25 per cent) mentioned that they use agricultural technologies, innovations, schemes, programmes, good practices disseminated by agricultural professionals, agriculture organisations, and various departments of ministries.

Table 5

Visiting Facebook Pages of Agricultural Organisations

Response	Frequency	Percentage
No	859	95.4
Yes	41	4.6
Total	900	100.0

Source: Based on the survey conducted.

Only 41 respondents mentioned that they visit the Facebook pages of agriculture organisations for the latest news (Table 5).

Visiting Web Portals and Apps: Among web portals, the Swayam portal was seen by 56

respondents, followed by IFFCO, 28 respondents. Regarding the apps, 140 respondents mentioned the Krishikisan app, followed by ePathshala (52 respondents). A total of 540 respondents perceive social media as useful, while 127 disagreed.

Table 6

Access information relating to healthcare through social media

Response	Frequency	Percentage
No	419	46.6
Yes	481	53.4
Total	900	100.0

Source: Based on the survey conducted.

Table 7

Access Information Relating to Education through Social Media

Response	Frequency	Percentage
No	314	34.9
Yes	586	64.2
Total	900	100.0

Source: Based on the survey conducted.

Fifty-three per cent of respondents expressed that they access information relating to health care through social media. Table 7 shows that 64.2 per

cent of respondents access information about education through social media.

Table 8

Demographic Details and Usage of Social Media

		ANOVA				
		Some of Squares	df	Mean Square	F	Sig
	Between Groups	129.832	4	32.458		
Age (In Years)	Within Groups	704.097	892	.789	41.120	.00
	Total	833.929	896			
	Between Groups	3.023	4	.756		
Gender	Within Groups	128.437	892	.144	5.249	.00
	Total	131.460	896			
	Between Groups	7.075	4	1.769		
Martial status	Within Groups	176.291	892	.198	8.950	.00
	Total	183.367	896		0.000	
	Between Groups	18.544	4	4.636	9.286	.000
Monthly family income	Within Groups	445.298	892	.499		
	Total	463.842	896			
	Between Groups	7.352	4	1.838		
Nature of family	Within Groups	197.480	882	.224	8.209	.00
	Total	204.832	886			
	Between Groups	467.027	4	116.757		
Educational qualifications	Within Groups	1215.508	892	1.363	85.682	.00
quamoatorio	Total	1682.535	896			
	Between Groups	36.347	4	9.087		
Members in the family	Within Groups	1973.492	892	2.212	4.107	.00
,	Total	2009.839	896			
	Between Groups	22.277	4	5.569		
Literates in the family	Within Groups	1357.881	886	1.533	3.634	.00
	Total	1380.157	890			

Table 8 also signifies the aspect that the actual use of social media differs based on the demographic variables of the respondents such as age, gender, marital status, income, nature of the family, educational qualifications, members in family and literates in the family. This is reflected by F values highly significant (p<0.001).

Social Media Usage Dimensions: Various dimensions influence the usage of social media technologies. These include ease of use, perceived usefulness, trustworthiness, social influence, perceived compatibility, perceived behavioural control and availability of resources.

Table 9

Dimensions of Social Media Usage	Mean	Std. Deviation		
Perceived ease of use	3.63	.731		
Perceived usefulness	3.60	.762		
Perceived compatibility	3.40	.810		
Perceived behavioural control	3.47	.917		
Trustworthiness	3.14	.855		
Social Influence	3.47	.860		
Availability of resources	3.35	.804		
Intention to use	3.60	.732		
Recommend to use	3.58	.790		

Descriptive Statistics of Social Media Usage Dimensions

Table 10

Correlation between Social Media Usage Dimensions and Intention to Use

Social Media Usage Dimensions		Intention to use
	Pearson Correlation	.642**
Perceived ease of use	Sig. (2-tailed)	.000
	Ν	817
	Pearson Correlation	.683**
Perceived usefulness	Sig. (2-tailed)	.000
	Ν	817
	Pearson Correlation	.562**
Perceived compatibility	Sig. (2-tailed)	.000
	Ν	817
	Pearson Correlation	.539**
Perceived behavioural control	Sig. (2-tailed)	.000
	Ν	817
	Pearson Correlation	.436**
Trustworthiness	Sig. (2-tailed)	.000
	Ν	817
	Pearson Correlation	.610**
Social Influence	Sig. (2-tailed)	.000
	Ν	817
	Pearson Correlation	.489**
Availability ofresources	Sig. (2-tailed)	.000
	Ν	817

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Table 9 depicts that the mean score of perceived ease of use and perceived usefulness of social media is relatively high compared to other dimensions. This implies that the respondents perceive using social media as free of effort and beneficial. The mean score of trustworthiness is relatively low, indicating that people have less trust in social media. The reasons could be the unreliability of content posted on social media, and the authenticity of information sources. Respondents also perceive that they do not have adequate facilities/ technologies to use social media, which is reflected in the mean score of availability of resources (3.35).

It is evident from Table 10 that correlation values between various social media usage dimensions and intention to use social media are positive and highly significant (p < 0.001). This signifies that if people perceive the use of social media to be useful, compatible with their needs and expectations, reliable and have adequate resources, they intend to use social media technologies.

Usage of Social Media: An Investigation of a Few Important Facebook Pages/WhatsApp Groups

Social media is emerging as a powerful force in all facets of life. Various organisations and groups use it to improve communication and engagement techniques. The use of social media and ICT enhances communication between different parties, encourages reviews and feedback, and enables individuals' involvement. Individuals, private organisations and government agencies use social media to reach out to target individuals. They often use social media to communicate with others to maximise their participation. Social media makes it possible to serve as a conduit between the government and people in many ways. The number of studies on the use of social media by the government to involve individuals and the use of social media platforms created by the government for the rural population is limited. The following section highlights different social media platforms created to support rural people.

The Telangana State Institute for Rural Development (TSIRD): It is the apex training and capacity building institute for panchayat raj and rural development in Telangana. It performs functions such as teaching, research, monitoring, and evaluation. The emphasis is on decentralised & management, natural resource planning management, IT & e-government, women & child development, sanitation, rural water & infrastructure management, and many other fields.

TSIRD rural development department's Facebook profile has 3,619 likes and 3,655 followers. By evaluating the page post strength and interaction, it has been found that the intensity (frequency of posting) is lower and the like for each message is not more than 20. This shows that though people are using the platform, the usage is not quite significant, and there is relatively less active interaction on this Facebook profile.

National Health Mission, Government of Telangana: This Facebook page posts the latest updates on health services and best practices for Telangana's 31 districts. The website has 8,671 likes (as of 24th October 2020) and 8,819 users on the page. The page interaction is relatively strong, with more than five posts on average a week. The page followers' engagement is comparatively much smaller; on average, an article is liked by 15 people and shared by six.

Telangana Business Group: There are several online business communities on Facebook in different business categories. One such page, Telangana Business Group, is primarily for sales and purchases of additional items in the Telangana region. The page, created in August 2017, has 41,959 fans and 10,000 updates as of September 2020. This indicates that the page is actively involved. The posts on this page refer to sale of numerous items, such as clothes, electronic gadgets, property, and furniture. This page allows merchants to meet their clients and create a business with them. Another website that carries out related operations is the Telangana Online Market. This page has 26,791 followers and has a daily average of 800 messages. Posts in this group

are created by the public, particularly those who want to sell their goods.

Chenetha Santha: The Handloom Weaver's Market: The handloom weaver marketing platform was launched in 2015 with Telangana and Andhra Pradesh weavers. They started organising a small event called Santha, where they had 25 to 30 stalls of products from Karnataka, Tamil Nadu, Rajasthan, Madhya Pradesh, Gujarat, Haryana, and West Bengal. This Facebook profile has 2,618 followers and 2,515 likes. This page only shows handloom products and offers a forum to advertise their products and reach consumers. A post on this page reveals how it supports rural women to market products like embroidery, bags, and smartphone pouches.

These pages include company location, phone number, email, website, and service hours. It also identified market vendors who are essential to consumers and vendors.

Social media engage individuals on a greater scale and quicker than prior interaction media have enabled. Small and large companies have adopted social networking sites for marketing and communication purposes in a standardised manner, with a low need for specific technical expertise and a low cost. Small business posts in Facebook groups such as Telangana Online Market, Telangana Business Group, and Chenetha Santha have benefited from Facebook as a marketing platform.

The Facebook page of Telangana Agriculture was created on 22nd November 2015 to support farmers with the latest techniques and provide information about government subsidies, advanced technology and other farming skills. There are 14,804 followers and 13,498 likes as of 6th November, 2020.

Harvesting Farmer Network (WhatsApp): V. Malla Reddy, a watermelon farmer from Telangana, had lost hope when he found only a few takers for his produce. Those who expressed interest in business offered a meagre Rs 4-5 per kilo, which was lower than 60 per cent of the

normal price. Disappointed, he shared photos of his crop in the Harvesting Farmer Network with a proposition to deliver them in Hyderabad. His post was marked by Hyderabad resident Vaishnavi Sunka who pooled her contacts and finally succeeded in placing an order for 2.5 tonnes of watermelons at Rs 20 per kilo.

e-Sayam WhatsApp Group: e-Sayam WhatsApp group was created to help farmers in Karimnagar. First ever in the State, the administration has designed 'e-Sayam', a WhatsApp group comprising agricultural officials, agricultural extension officers (AEOs), and scientists of Krushi Vignana Kendram (KVK) and Jammikunta. Agriculture Department and KVK have been jointly implementing the programme since 1st December, 2017. As an integral part of the programme, AEOs would visit agricultural fields and identify standing crops. If they find any problem (diseases), they will take a picture of the affected crop using tablets supplied to them and post the photo on the e-Sayam WhatsApp group.

Five to six scientists, who are part of the group, would give their advice for solving the particular problem, and the AEOs would pass this information to the farmers. If the scientists fail to respond, the AEOs will try to get information from agricultural scientists working elsewhere and post the solution in the group within one hour.

Mobile Apps: The Ministry of Rural Development has released a range of smartphone applications that can support rural communities, Gram Samvaad – Single Window Access Gram Panchayat, Janmanrega - Standard of public services, Awaas App - Rural Housing Schemes, Meri Sadak - Feedback for National Rural Roads, Kaushal Panjee - Skill Register, GSA 18 - to track Gram Swaraj Abhiyan, etc. Similarly, there are apps related to the rural development of Telangana, apart from Vyavasayam Telugu Farmers App, Crop Bee, Cotton Telugu, Rice Telugu, Krishi Gyan, Vyavasaya Yanthralu Agricultural Machines, Paadi Parisrama Dairy Farm, and Chilli Telugu. These apps provide information related to agriculture in Telugu.

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NaPanta Mobile App: NaPanta Mobile App enables a farmer to access real-time and dynamic information about various crop management techniques, weather forecasting, 120+ crops pest control, cold storage, agri equipment rental, sale/ purchase, crop insurance and related agri-dealer information of the farmer's location. This free mobile application permits the farmers to track their expenses in a systematised manner. NaPanta is an all-embracing digital platform intended to support farmers. Since June 2017, around 200,000+ farmers across the States of AP and Telangana have subscribed to NaPanta digital platform to access real-time agricultural crop-specific information. This allows them to make informed decisions to decrease their crop spending by up to 20 per cent and growth in the yield by up to 15 per cent, with overall profitability going up by a third.

Social media is helping the government to ensure the reach of its schemes to the needy, which is guite difficult in the normal course. Apart from keeping in touch with people, social media is also being utilised for developing small and medium enterprises, and marketing the products of self-help groups. Social media sites help market the products made by rural women with the help of online marketing avenues such as Amazon. The government had taken up a programme named "improve your business" through Facebook. Various government departments are regularly posting details of developmental programmes and ongoing works. But among the 327 farmers who are part of the survey, 83 respondents (25 per cent) responded that they use the agricultural technologies, innovations, schemes, programmes, good practices disseminated by agricultural professionals, agriculture organisations, and various departments of ministries of Government of India. Still, many farmers are not leveraging the potential.

Policy and Theoretical Implications

People need a positive attitude towards social media, and more quality awareness programmes are required in this direction. The success stories of those who fruitfully used social media and the benefits they reaped have to be shown and discussed to motivate the people. People in rural areas perceive social media to be helpful. But many respondents expressed that they lack the skill and expertise to use various social media platforms for accessing the information. Hence, immediate attention is needed to impart the necessary expertise to the people for utilising the potential of social media. In order to enable farmers to connect with customers and suppliers locally, nationally and internationally, online marketing applications for agricultural products should be developed. People are also hesitant to use social media for marketing their produce; hence, training on social media in agri marketing is needed. Agriculturalists should use social media to promote their agri-business and agriculture in general. The use of social media requires practice and learning from experience. Change agents should discover ways to make people in rural areas better understand how and why to use various social media tools.

The effectiveness of social media usage depends on user engagement; if rural users are not actively engaged in conversations, it will not benefit anyone. Though certain Facebook pages of ministries, government agencies, and business groups are actively involved with more followers and posts, many pages do not have active users, and there is relatively less dynamic interaction. Hence, engaging the rural community is very important. The choice of social media platforms has to consider client preference along with content. A major deterring factor for social media use is the lack of genuineness of online information. Issues relating to privacy, information explosion, irrelevant posts, conflicting information, risk, and trustworthiness of social media act as impeding factors in using social media. Privacy concerns can be addressed through workshops by creating awareness of the challenges, risks and risk management.

Extensionists and other actors must be imparted the necessary expertise to use social media more professionally. Practitioners must 150

decide upon the kind of information the audience require and uncover a way to present it in an easily understandable manner. Integrating personality into social media posts is guite important. This way, one can show a genuine interest and zeal for agriculture and the information provided. If people can relate to the writer, they are more likely to relate to the information. It is important to be consistent as it gives confidence to the audience to see the information provided as reliable and accurate. This implies creating a posting schedule and strict adherence to it. Proper physical infrastructure is required to access social media. Poor connectivity, high data charges, and low bandwidth greatly limit social media access, and creation of necessary infrastructure for Internet connection is required. The low-income level in rural areas gives respondents the impression that the cost of accessing Internet is high. The government needs to look into providing affordable Internet with appropriate bandwidth.

Limitations of the Study and Scope for Further Research

The present research has a few limitations. The total sample of respondents invited to participate in the survey constitutes only a fraction of the thousands of social media users in rural areas of Telangana. Future analysis needs to rely on a broader cross-section of social media participants and a more diversified randomised survey to corroborate the results of the current study. The

scope of the present study is confined to the role of social media in rural development in Telangana. Similar studies may be undertaken in other States to understand the issues comprehensively.

Conclusions

With recent developments in information and communications technology (ICT), we are in a super-connected society. Technology development has been addressing many problems or giving better solutions. Also, technological advances have been used in many developing countries to improve agriculture, education, health, business and communication sectors. Few of such technological advances are accessibility of mobile phones, Internet and social media platforms to the rural population. The rural people of Telangana use social media platforms such as WhatsApp, Facebook and YouTube frequently. Mainly they are used for entertainment and connecting with friends and family. Social media has more potential to change rural people's life. So, government, development authorities, educational institutions, and students need to pitch in and create awareness, conduct training programmes and educate individuals to get the best out of social media.

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Author's Contribution

V.Rama Devi conceived the idea of research, contributed to literature review, planned methodology, performed data analysis, interpreted results, wrote the paper, and reviewed the article before submission for its content and presentation.

Dr. Merugu Venugopal contributed to literature review, collected data, performed data analysis and also contributed to writing part of the article.

References

- Balakrishna, B.B. & Deshmuk, A.A.(2017). A Study on Role of Social Media in Agriculture Marketing and its Scope. *Global Journal of Management and Business Research: E-Marketing, 17* (1), 1-5
- Bumgarner, B. A. (2007). You have been Poked: Exploring the Uses and Gratifications of Facebook among Emerging Adults. *First Monday, 12*(11)
- Charney, T., & Greenberg, B. S. (2002). Uses and Gratifications of the Internet. In C. A. Lin & D. J. Atkin (Eds.), Communication Technology and Society: New Media Adoption and Uses, pp. 379-407.
- Eagle, N., Macy, M., & Claxton, R.M. (2010). Network Diversity and Economic Development. Science, 328, 1029 - 1031.
- Ekta Bansal (2015). Impact of Social media on Rural India. International Journal of Marketing Research and Business Strategies, 4(3), 201-207.
- Ferguson, D. A., & Perse, E. M. (2000). The World Wide Web as a Functional Alternative to Television. Journal of Broadcasting & Electronic Media, 44(2), 155-174.
- Ghedin, G. (2013). Social Media in Rural India: Bridging The Digital Divide. Retrieved from http:// www.digitalintheround.com/ on 23rd November 2018.
- James, P. and Hopkinson, P. (2005), Sustainable broadband? The Economic, Environmental and Social Impacts of Cornwall's Act Now Project, technical report, University of Bradford and Sustain IT, Bradford.
- Kaye, B. K., & Johnson, T. J. (2004). A Web for All Reasons: Uses and Gratifications of Internet Components for Political Information. *Journal of Telematics and Informatics*, 21, 197-223.
- Ko, H., Cho, C. H., & Roberts, M. S. (2005). Internet Uses and Gratifications: A Structural Equation Model of Interactive Advertising. *Journal of Advertising*, 34(2), 57-70.
- Martin, L.M. and Matlay, H. (2003). Innovative Use of the Internet in Established Small Firms: The Impact of Knowledge Management and Organisational Learning in Accessing New Opportunities. *Qualitative Market Research: An International Journal, 6*(1), 18-26.
- Mills, J., Reed, M., Skaalsveen, K. & Ingram, J. (2019). The Use of Twitter for Knowledge Exchange on Sustainable Soil Management. *Soil Use Management*, *35*, 195-203.
- Papacharissi, Z., & Rubin, A. M. (2000). Predictors of Internet Use. Journal of Broadcasting & Electronic Media, 44(2), 175-196.
- Rai, G.A. & Shahila, Z. (2013). Rural India: The Next Frontier for Social Media Networks, International Journal of Engineering Research & Technology, 2(1), 1-6.
- Roche, S., Renaud, D., Genore, R., Bauman, C., Croyle, S., Barkema, H., Dubuc, J., Keefe, G. & Kelton, D. (2020). Communication Preferences and Social Media Engagement among Canadian Dairy Producers. *Journal of Dairy Science*, 103(12), 12128-12139.
- Rodak., O. (2020). Hashtag Hijacking and Crowdsourcing Transparency: Social Media Affordances and the Governance of Farm Animal Protection. *Agriculture and Human Values, 37*(2), 281-294.
- Ruggiero, T. E. (2000). Uses and gratifications theory in the 21st century. *Mass Communications & Society, 3*(1), 3-37.

Journal of Rural Development, Vol. 41, No.1, January-March 2022

- Samar, Ali & Waqas (2016). The Role of Mass Media in Rural Development: A Case Study in District Rajanpur. *International Journal for Social Studies, 2*(3), 15-27.
- Singh, G., Singh, P., Tiwari, D. & Singh, K. (2021). Role of Social Media in Enhancing Agricultural Growth, Indian Journal of Extension Education, 57(2), 69-72.
- Skaalsveen, K., Ingram, J. & Urquhart, J. (2020). The Role of Farmers' Social Networks in the Implementation of No-till Farming Practices. *Agricultural Systems*, 181(C).
- Schuler, P. & Truong, M. (2019). Connected Countryside: The Inhibiting Effect of Social Media on Rural Social Movements. *Comparative Political Studies*, 52(4), 647-669.
- Sitaram, A. (2012). The Economics of Attention: Social Media and Businesses, Vikalpa, 37 (4), 69-111.
- Alabi, A. O., Onifade, F. N., & Sokoya, A. A. (2013). Social Media in Agricultural Research in Nigeria: A Platform for Connections and Networking. *The Information Technologist*, 10(2), 1–10.
- Wonneberger, A., Hellsten, I. R., & Jacobs, S. H. J. (2021). Hashtag Activism and the Configuration of Counterpublics: Dutch Animal Welfare Debates on Twitter. *Information, Communication & Society, 24* (12), 1694–1711.
- Wyn Morris and Penri James (2017). Social Media, An Entrepreneurial Opportunity for Agriculture-based Enterprises. *Journal of Small Business and Enterprise Development, 24*(4), 1028-1045.
- Yin, X., Chen, J., & Li, J. (2022). Rural Innovation System: Revitalize the Countryside for a Sustainable Development. *Journal of Rural Studies*, 93, 471–478.