

Original Research Article

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## Role of Digital Services in Capacity Building of Farmers in the Central Zone of Uttar-Pradesh

Naveen Kumar Gautam<sup>1</sup>, V. K. Singh<sup>1</sup>, Madhuri Mishra<sup>2\*</sup> and Aman Rathaur<sup>3</sup>

<sup>1</sup>Department of Agriculture Extension, C.S.A. University of Agriculture & Technology,  
Kanpur, India

<sup>2</sup>Department of Agriculture Extension, Bhagwant University, Ajmer, Rajasthan, India

<sup>3</sup>Department of Dairy Science and Food Technology, Institute of Agricultural Sciences,  
Banaras Hindu University, Varanasi, India

\*Corresponding author

### ABSTRACT

As soon as demonetization took place in India on November 8, 2016, online payments increased rapidly only days after that. In a way, it was the first social sign of digitized India, in the agricultural sector. The D.B.T. scheme being run by the Government of India is also an excellent example of digital India and with the digital India initiative variety of knowledge and way of learning also got transformed. Our study has been done to observe the role of digital services for capacity building among central Uttar Pradesh farmers. For data gathering and observation, we developed a schedule with the help of experts from C.S.A.U. A. & T. University. Through the squeeze of our study, we came to know that our farmer brothers have given priority to the Internet-based services and Jansevakendra was their primary choice.

#### Keywords

DBT, Internet, KCC  
and Communication

#### Article Info

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### Introduction

At present, even though the agriculture sector contributes only 17% of the GDP, 60% of India's population depends on the agriculture sector for livelihood and this 60% of the population gets the benefit of their hard work and Government of India schemes, can be secured by digital India. However, the

digitization and use of technology in agriculture has, thus far, been taking place in confined application field. Technology in rural areas is a kind of taboo subject because of the complexity of techs, which can be resolve by understanding the utilization pattern and source of services. As we know, capacity building is the process by which individuals and organizations obtain, improve, and retain

the skills, knowledge, tools, equipment and other resources needed to achieve their goals. In current situations, we have land scarcity but need to feed a large sum of population, which can be possible with the help of well-capable farmers.

The main objectives of this study includes Observing role of digital services in capacity building of farmers in the central zone of Uttar-Pradesh

### **Materials and Methods**

The present investigation was conducted in Kanpur, Unnao and Fatehpur districts of Uttar-Pradesh state. From each randomly selected block of each district, three villages selected on random basis, thus a total of 9 villages selected from districts 25 respondents from each village were selected randomly and thus total 225 farmers were selected as respondents, personal interview method was used. The analytical tool like frequency and percentage were used to analyze the data District Kanpur, Unnao and Fatehpur of central zone of U.P. selected purposively for the present study because of investigator's convenience, nearness to the existence of C.S.A University of Agriculture and Technology, Kanpur.

### **Results and Discussion**

We can observe from table 1 that jansvakendra mostly used for management purpose and 64.88% farmers agreed with it followed by 36.44%, 30.66% and 24.88% used for marketing, method learning and technical adoption respectively. Agriculture web portals are also mostly used for management purpose and 46.22% farmers agreed with this followed by 38.66%, 25.77% and 20.00% used for method learning, marketing and techniques respectively. Messenger and chat services are mostly used

for marketing purpose and 48.44% farmers agreed with this followed by 37.33%, 25.77% and 14.22% used for method learning, management and techniques respectively. Video websites and apps are mostly used for gathering technical information and 80.44% farmers agreed with this followed by 78.66%, 65.77% and 12.00% used for method learning, management and marketing respectively. Agriculture app have very little popularity among farmers only 37.77% farmers used them marketing purpose followed by 11.11%, 08.00% and 04.88% used them for any new method learning, technical information and management respectively. Rather than agriculture app services government web portals have very good presence among farmers like 74.22% farmers used them for marketing followed by 23.11%, 11.11% and 06.66% used them for technical information, management and method learning respectively. In various way NGOs are also supporting digital services like mostly 33.33% farmers used their services for management followed by 25.33%, 12.44% and 08.00% farmers used NGOs for method learning, technical support and marketing respectively.

In given table 2 we can observe role of various digital platforms launched by government in skill development or capacity building among farmers. Farmers.gov.in is one of the mostly used portal for every purpose which helped framers in capacity building in various way like 83.11% farmers used it for management followed by 09.33%, 37.77%, and 16.44% for techniques adoption, method learning and marketing respectively. Agriculture.gov.in is portal which help farmers to a get informed for marketing, around 01.77% farmers respectively agree with it. Upagripardarshi.gov.in is second most usable portal among farmers, mostly 49.33% farmers used it for techniques adoption purpose followed by 39.11%, 42.22% and 32.88% for method learning, management and marketing

respectively. [Mkissan.gov.in](http://Mkissan.gov.in) is one of the impactful portals which helped 24.00% of farmers in their marketing skill followed by 12.00%, 24.00% and 06.00% for techniques adoption, method learning and management respectively. Other hand [agrionline.nic.in](http://agrionline.nic.in) is a portal which helped farmers only in marketing skills, approx. 01.77% farmers agree with it. [Enam.gov.in](http://Enam.gov.in) is a portal helps to improve marketing skills of farmers, 68.44% farmers used it for marketing, only 09.33% and 6.22% farmers choose it for technique adoption and method learning. Like e-nam, [agrimarknet.gov.in](http://agrimarknet.gov.in) is another web portal which helps farmers in marketing 54.22% farmers used it for marketing, only 06.66%, 04.88% and 28.88% farmers choose it for technique adoption, method learning and management skill improvement respectively. [Rural.nic.in](http://Rural.nic.in) is a portal which helps 03.55%, 01.77% and 08.00% farmers with their technique adoption, method learning and management skills respectively. [Fert.nic.in](http://Fert.nic.in) is a portal dedicated to fertilizers, which helps 00.88% farmers with their marketing skills. [Apeda.in](http://Apeda.in) also a gov. portal, 05.33%, 02.22% and 24.44 % farmers found it useful for technique, methods and marketing skills respectively.

[Upagriculture.com](http://Upagriculture.com) is one of state-oriented web portal, 27.55% farmers found beneficial management information from it, followed by 11.11% and 02.22% farmers found it useful for technique and marketing skills respectively.

According to table 3, [indiaagrstat.co](http://indiaagrstat.co) is a portal which got explored by our 10.66% farmers for marketing followed by 05.33% for management respectively. [Isapindia.org](http://Isapindia.org) is portal which helped our farmers in capacity building, 08.00% farmers which prefer it for their marketing skills. [Indiancommodities.com](http://Indiancommodities.com) is one of the websites which help farmers in their marketing skill followed by 12.44% and

06.66% farmers whom found it helpful for their management and marketing skill. [Krishi.net](http://Krishi.net) is also a kind of marketing web portals and 40.00% farmers agree with it.

[Agriwatch.com](http://Agriwatch.com) is portal which help 12.00% and 16.00% for management and marketing. [Agrijagran.com](http://Agrijagran.com) is quite useful for technical information, 05.33% farmers agree with it followed by 13.33%, 11.11% and 00.88% used it for method, management and marketing respectively.

[Agriquest.info](http://Agriquest.info) is dedicated portal for information sharing for which 18.66% followed by used it for technical information 08.44% and 32.00% for method, management and marketing respectively. In all private web portals [krishiworld.com](http://krishiworld.com) is one of the websites which is used by farmers for every purpose, mostly 22.22% used for technical knowledge followed by 22.22%, 23.11% and 12.44% for methods, management and marketing respectively.

Observing above table 4, we can assume that many farmers found these web-portals helpful in capacity building. 79.11% farmers agree with that organizational skills get improved by these web portals and 20.88% farmers can't say anything about it, in case of management skills 49.77% farmers found these websites helpful followed by 43.55% farmers who have nothing to say about it and 06.66% farmers who have disagreement.

Business savvy skills mostly affected by these web portals and 92.44% farmers agree with it followed by 06.66% can't say anything and 00.88% farmers have disagreement. People skills directly relate to social behaviour and digital platforms affect it, 54.22% farmers agree with it, when 36.00% farmers can't say anything and 09.77% farmers don't find any role of digital services in people skills.

**Table.1** Role of service providers in various ways

S. No.	Service provider	Information			
		Techniques	Methods	Management	Marketing
1	Jan sevakendra	56 (24.88)	69 (30.66)	146 (64.88)	82 (36.44)
2	Agriculture web portals	45 (20.00)	87 (38.66)	104 (46.22)	58 (25.77)
3	Messenger apps and chat services	32 (14.22)	84 (37.33)	58 (25.77)	109 (48.44)
4	Video websites and apps	181 (80.44)	177 (78.66)	148 (65.77)	27 (12.00)
5	Agriculture app	18 (08.00)	25 (11.11)	11 (04.88)	85 (37.77)
6	Gov. web portals	52 (23.11)	15 (06.66)	25 (11.11)	167 (74.22)
7	NGOs	28 (12.44)	57 (25.33)	75 (33.33)	18 (08.00)

**Table.2** Role of government/public digital services capacity building

S. No.	Service	Information			
		Techniques	Methods	Management	Marketing
1	farmer.gov.in	21 (09.33)	85 (37.77)	187 (83.11)	37 (16.44)
2	agriculture.gov.in	00 (00.00)	00 (00.00)	00 (00.00)	04 (01.77)
3	upagripardarshi.gov.in	111 (49.33)	88 (39.11)	95 (42.22)	74 (32.88)
4	mkisan.gov.in	27 (12.00)	54 (24.00)	15 (06.66)	54 (24.00)
5	agrionline.nic.in	00 (00.00)	00 (00.00)	00 (00.00)	04 (01.77)
6	enam.gov.in	21 (09.33)	14 (06.22)	00 (00.00)	154 (68.44)
7	agmarknet.gov.in	15 (06.66)	11 (04.88)	65 (28.88)	122 (54.22)
8	rural.nic.in	08 (03.55)	04 (01.77)	18 (08.00)	00 (00.00)
9	Fert.nic.in	00 (00.00)	00 (00.00)	00 (00.00)	02 (00.88)
10	Apeda.in	12 (5.33)	00 (00.00)	05 (02.22)	55 (24.44)
11	Upagriculture.com	25 (11.11)	00 (00.00)	62 (27.55)	05 (02.22)

**Table.3** Role pf private/NGOs digital services in capacity building

S. No.	Service	Information			
		Techniques	Methods	Management	Marketing
1	Indiaagristat.com	00	00	12 (05.33)	24 (10.66)
2	Isapindia.org	00	00	00	18 (08.00)
3	Indiancommodities.com	00	00	15 (06.66)	57 (25.33)
4	Krishi.net	00	00	00	90 (40.00)
5	Agriwatch.com	00	00	27 (12.00)	36 (16.00)
6	Agrijagran.com	12 (05.33)	30 (13.33)	25 (11.11)	02 (00.88)
7	Agriquest.info	42 (18.66)	00	19 (08.44)	72 (32.00)
8	Krishiworld.com	50 (22.22)	50 (22.22)	52 (23.11)	28 (12.44)

**Table.4** Skills which improved through capacity building

S.No.	Skills	Agree	Can't say	Disagree
1	Organizational skills	178(79.11)	47(20.88)	00
2	Management skills	112(49.77)	98(43.55)	15(06.66)
3	Business savvy skills	208(92.44)	15(06.66)	02(00.88)
4	People skills	122(54.22)	81(36.00)	22(09.77)
5	Creative skills	156(69.33)	69(30.66)	00
6	Technical skills	201(89.33)	24(10.66)	00

Creativity is one of the dominant skills among Indian farmers and digital services played a vital role to improve them, 69.33% farmers agree with it and 30.66% farmers were unable to say anything. Like creativity technical skill also got affected from digital services, mostly 89.33% farmers agree with it and 10.66% farmers can't say anything.

Overall observation on this study revealed that mostly for learning or getting information our farmers now these days use video portals and apps. The reason behind the popularity of these portals is availability of smart phones in

every hand and cheapness of internet data. Our farmer brothers also preferred Jan Sewa Kendra because every required tech is available in a single place like modem, printer etc. In other hand, government portals and apps are less popular, poor management and less advertisement of these portals can be responsible for it. Agriculture oriented NGOs and web portals are also vital for our agriculture ecosystem, but in digital services they are left behind. In the extraction of our research, we found that most of our farmers agreed with the thought of “digitalization playing a vital role in their capacity building.”

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