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# Impact of ICT used by the respondent in Bihta block of Patna region

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#### Abstract

The present study was conducted to explore the socio -economic condition and different communication Networks used by farming youth and its impacts on the innovative farming system adopted by the farmers. The descriptive research design has been used by the researcher, and PRA technique was used to identify the problems of rural farming youths. Two hundred responding were selected through the purposive sampling from Bihta and Bikram block of Patna region of Bihar, For the dissemination of information Audio - visual, Visual and Audio media are used by the respondents along with various social sites and apps, it was observed that maximum number of youths were using Kisan call canter for the Agricultural updates. The modern Indian farming system inclusive ICT, with the farm management system to keep track inputs and outputs and economics weather forecasting, early warnings and decision support system for management.

Keywords: PRA, ICT, Dissemination, technology, mobilization

### Introduction

Communication network in simple terms can be defined as the basket of technologies, which assists or support in storage, processing of Data/Information or in dissemination can be through radio, T.V., newspaper, e-portals, social media or mobile phone that will turn agriculture into e-agriculture and will conceptualize the farmers of modern techniques and benefit them in a number of ways. But the truth behind the curtain is that despite such a vast use of internet and smart mobiles still large populations of 50%-55% have no reach to modern communication means. (Manorma year book 2015) [7]

Over, the past thirty years communication network have been introduced in agri-sectors. Important milestones were introduction of computers (1980s), internet, email and mobile phones and Global navigation satellite system (GNSS), wireless communication and social media. Modern farms make use of one or more of the following ICT. Computers with a farm management system to keep track inputs, outputs and economics weather forecast, early warning and decision support systems for crop management auto guidance system for controlled traffic on fields, tractor

mounted board computers for steering of sprayers and other machines in a preferred way and data registration.

#### **Objectives**

- To assess the socio-economic characteristics of the respondents.
- To find out the different communication networks used by the respondents.

#### Research Methodology

The study was conducted in Patna region corresponding their outs kits villages in Bihar. In Patna region there were twenty-three blocks out of that Bihta and Bikram was purposively selected because of large number of mobile user and electricity supply is regular and large number of literate population, ten villages (five from each) were selected randomly thus a total of two hundred respondents were selected for the present study.

Table 1: Socio-economic level /status of the respondent

S. No	Level	Frequency	Percentage
1	Low	69	34.50
2	Medium	92	46.00
3	High	39	19.50
Total		200	100

It was observed that the level that 46.00 per cent socio-economic level was medium level followed by 34.50 per cent socio-economic level was low followed respectively by high level 19.50 per cent.

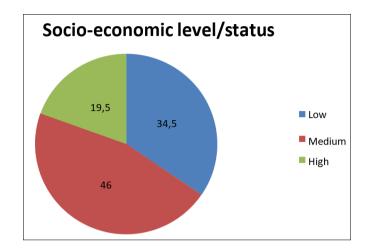


Table 2: Different Sources of communications networks

S. No	Sources	Frequency	Percentage
1	Friends	83	32.00
2	Neighbour	96	38.00
3	Relatives	79	27.00
4	Media	89	44.50
5	Kisan Call Centre	122	61.00
6	Internet	59	29.50
7	KVK	16	08.00
8	Private field staff	51	25.50
9	BDO/AO	06	03.00

# Multiple responses

The data presented on Table 2 shows that the 61.00 per cent respondents get information through Kisan call center where as 44.50 per cent respondents find information about farming through media, 38.00 per cent get information through neighbours and respectively 32.00 per cent, 29.50 per cent, 27.00 per cent, 25.50 per cent and

8.00 per cent and 03.00 per cent respondents got knowledge by communicating from friends, internet, relatives, private field staff KVK, private staff respectively and BDO/AO. Similar founding is also reported by Ezekiel Babatope Familusi, (2014) [13], it was also found that 98 per cent respondents mostly used radio to access information followed by mobile phone 86.70 per cent television 85.80 per cent, Newspaper 75 per cent, social network 65 per cent DST and other cable television 48.3 per cent and Internet 46.70 per cent was the list most accessible and usable to access information among the residents.

Table 3: Extent of use of social networks by the respondents (Computer & Mobile apps)

S. No	Social network/Sources	Purpose	Frequently	Occasionally	Daily	Once week	Monthly	Never
		Only obotting	22	59	31	32	34	23
1	Gmail and others mail services like	Only chatting	(11.00)	(29.50)	(15.50)	(16.00)	(17.00)	(11.50)
1	yahoo etc.	Agriculture	14	21	17	59	61	28
	-		(07.00)	(10.50)	(08.50)	(29.50)	(30.50)	(14.00)
		Only chatting	21	59	31	31	36	22
		Only chatting	(11.50)	(29.50)	(15.50)	(15.50)	(18.00)	(11.00)
2	2 377 4 4	Agriculture	16	44	21	29	26	64
2	WhatsApp		(08.00)	(22.00)	(10.50)	(14.50)	(13.00)	(32.00)
		Entertainment	76	45	23	19	14	23
			(38.00)	(22.50)	(11.50)	(09.50)	(07.50)	(11.50)
		Only chatting 14 45 17 36	36	59	29			
		Only chatting	(07.00)	(22.50)	(08.50)	(18.00)	(29.50)	(14.50)
3	Face book	Agriculture	11	23	19	21	81	51
3	race book	Agriculture	(05.50)	(12.50)	(09.50)	(11.50)	(40.50)	(25.50)
		Entertainment	14	33	21	34	36	79
		Entert	Entertainment	(07.00)	(16.50)	(11.50)	(17.00)	(18.00)

4	Twitter	Only chatting	00	19 (09.50)	00	00	00	181 (90.50)
4	1 witter	Agriculture	00	14 (07.00)	00	00	00	186 (93.00)
		Only chatting	00	49 (24.50)	00	00	00	151 (75.50)
5	You tube	Agriculture	00	41 (20.50)	00	00	00	159 (79.50)
		Entertainment	00	99 (49.50)	00	00	00	101 (50.50)
6	M-Kisaan	Agriculture	00	111 (55.50)	11 (05.50)	00	00	78 (19.50)
7	Kisansuvidha app	Agriculture	00	90 (45.00)	13 (06.50)	09 (04.50)	00	88 (44.00)
8	KCC	Agriculture	00	122 (61.00)	00	00	00	88 (44.00)

The above table shows that majority (61.00%) of the respondents use kisan call center, where as 55.50 per cent respondents use M-Kisan and respectively 45.00 per cent were use kisansuvidha app, 23.78 per cent respondents were use Whatsapp for their requrments,22.16 per cent respondents use YouTube for better agricultural information and followed by the Facebook, Gmail, Twitter. Similar finding is also reported by Bite Bhalchandra Balkrishna *et al.* most of them are using WhatsApp followed by Facebook and YouTube.

Correlation between selected independent variables and Extension of use

Independent variables	Extension of use
Age	-0.121
Education	0.831**
Caste	0.011
Size of family	0.413**
Occupation	0.078
Land holding	0.313*
Annual Income	0.654**
Social Participation	0.530**
Extension Contact	$0.680^{**}$

## Correlation is significant at the 0.01 level.

The correlation analysis is carried out to know the association/relationship between mobilization of independent stalk holder and all other social economical condition/status of the respondents employed for my study. The correlation coefficient results shows that the motivation of the respondents was high significantly correlate positively and high significance with education level (0.831\*\*), size of family (0.413\*\*), annual income (0.654\*\*), social participation (0.530\*\*). And extension contact (0.680\*\*), and moderately positive correlate with land holding, occupation of the respondents. Whereas there was no association with the caste (0.011) and negative association with age (-0.121). It concludes that that the factors like education, size of family, annual income, social participation and extension contact are important socio economic status of the respondents plays a very important role in the mobilization. Whereas the factor like caste shows not much important in the mobilization.

#### Conclusion

It is concluded from the present study that the respondents have the medium level of socio-economic status. The major sources of information were friends, neighbor's, media, kisan call Centre, internet, KVK, privet field staff, BDO/AO. The respondents mostly use social network/computer/mobile for means communication like Gmail and other mail services, WhatsApp, Facebook, Twitter, YouTube, M-Kisan, KisansubhidhaApp, Kisan call centre. It shows that if we improve the education and income level of the respondents there will be more users of computers and mobile based app in future.

### References

- Bite Bhalchandra Balkrishna *et al.* A Study on Role of Social Media in Agriculture Marketing and its Scope, Global Journal of Management and Business Research: E Marketing. 2017;17(1):Version 1.0 Year 2017 Type: Double Blind Peer Reviewed International Research Journal Publisher: Global Journals Inc. (USA) Online ISSN: 2249-4588 & Print ISSN: 0975-585.
- 2. Gulati GA, Kurukshetr. Role of ICTs in Rural Development, The Monthly Journal, published from Ministry of Rural Development. 2012;60(3):3.
- 3. Ganesan, *et al.* Use of mobile multimedia agricultural advisory systems by Indian farmers: Results of a survey, Journal of Agricultural Extension and Rural Development. 2013;5(4):89-99. DOI: 10.5897/JAERD13.0466 ISSN 2141-2170 ©2013 Academic Journals.
- 4. Martin BJ. Mobile phones and rural livelihoods: An exploration of mobile phone diffusion, uses, and perceived impacts of uses among small- to medium-size farm holders in Kamuli District, Uganda, Iowa State University, Digital Repository @ Iowa State University, Graduate Theses and Dissertations Graduate College; c2010. p. 8.
- 5. Martin BJ. Mobile phones and rural livelihoods: An exploration of mobile phone diffusion, uses, and perceived impacts of uses among small- to medium-size farm holders in Kamuli District, Uganda, Iowa State University, Digital Repository @ Iowa State University, Graduate Theses and Dissertations Graduate College; c2010. p. 12.
- 6. Manoranjan Mohapatra. Value Added Services in Rural India. Connect-World, No. 26, India issue; c2009.
- 7. Manorma year book, computer section; c2015. p. 190-
- 8. Nyaga EK. Is ICT in Agricultural Extension Feasible in

- Enhancing Marketing of Agricultural Produce in Kenya: A Case of Kiambu District; Quarterly Journal of International Agriculture 51; c2012.
- 9. Orikp EE, et al. Information and Communication Technology and Enhancement of Agricultural Extension Services in the New Millennium, Department of Agricultural Education Federal College of Education (Technical), Umunze Anambra State, Nigeria, ISSN 2239-978X, Journal of Educational and Social Research. 2013;3(4):245-256.
- 10. Ramamritham K. Innovative ICT tools for information provisioning via agricultural extensions",1st IEEE/ACM International Conference on ICT4D, Berkeley; c2006. p. 19.
- 11. Ranjeet Singh, Mangaraj S. Abstract, Information Technology in Agriculture Present Scenario and Challenges, Agricultural Engineerig Today. 2006;30(3):5.
- 12. Overa R. Networks, Distance, and Trust: Telecommunications Development and Changing Trading Practices in Ghana. World Development. 2006;34(7):1301-1315.
- 13. Familusi EB. An Assessment of the Use of Radio and other Means of Information Dissemination by the Residents of Ado- Ekiti, Ekiti-State, Nigeria; c2014.